DOCUMENT RESUME

ED 274 835 CE 045 215

TITLE	Secretarial & Office Administration Curriculum Guide.
INSTITUTION	East Texas State Univ., Commerce. Occupational Curriculum Lab.
SPONS AGENCY	Texas Education Agency, Austin. Dept. of Occupational Education and Technology.
PUB DATE	86
NOTE	160p.; For related documents, see CE 045 214-217. Document is printed on colored paper.
AVAILABLE FROM	Occupational Curriculum Laboratory, East Texas State University, Commerce, TX 75428 (Order No. BO-205-TG: $3.00; with core document, BO-204-TG: $22.00).
PUB TYPE	Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Business Correspondence; Filing; Office Machines; *Office Management; *Office Occupations Education; *Office Practice; Recordkeeping; Secondary Education; *Secretaries; State Curriculum Guides; Transparencies; Typewriting; Units of Study; Vocational Education; Word Processing

ABSTRACT

As one of a series of curriculum guides for office education programs in Texas, this guide contains 11 units of instruction on secretarial and office administration. Each of the units contains these components: unit outline, performance chart for rating students, notes to the instructor, unit overview (content of unit with illustrations as needed), test, and transparency masters. Teacher and student activities, as well as educational resources are suggested, and estimated completion time is given for each unit. Units cover the following topics: typing, proofreading, correcting errors, mailable letters, electronic office, filing, records control, mail procedures, electronic calculators, copy machines, and data/word processing equipment. Ten appendixes provide resources, examples of teaching situations, samples of materials, and competencies needed by office education students. (KC)

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Secretarial & Office Administration

CURRICULUM GUIDE

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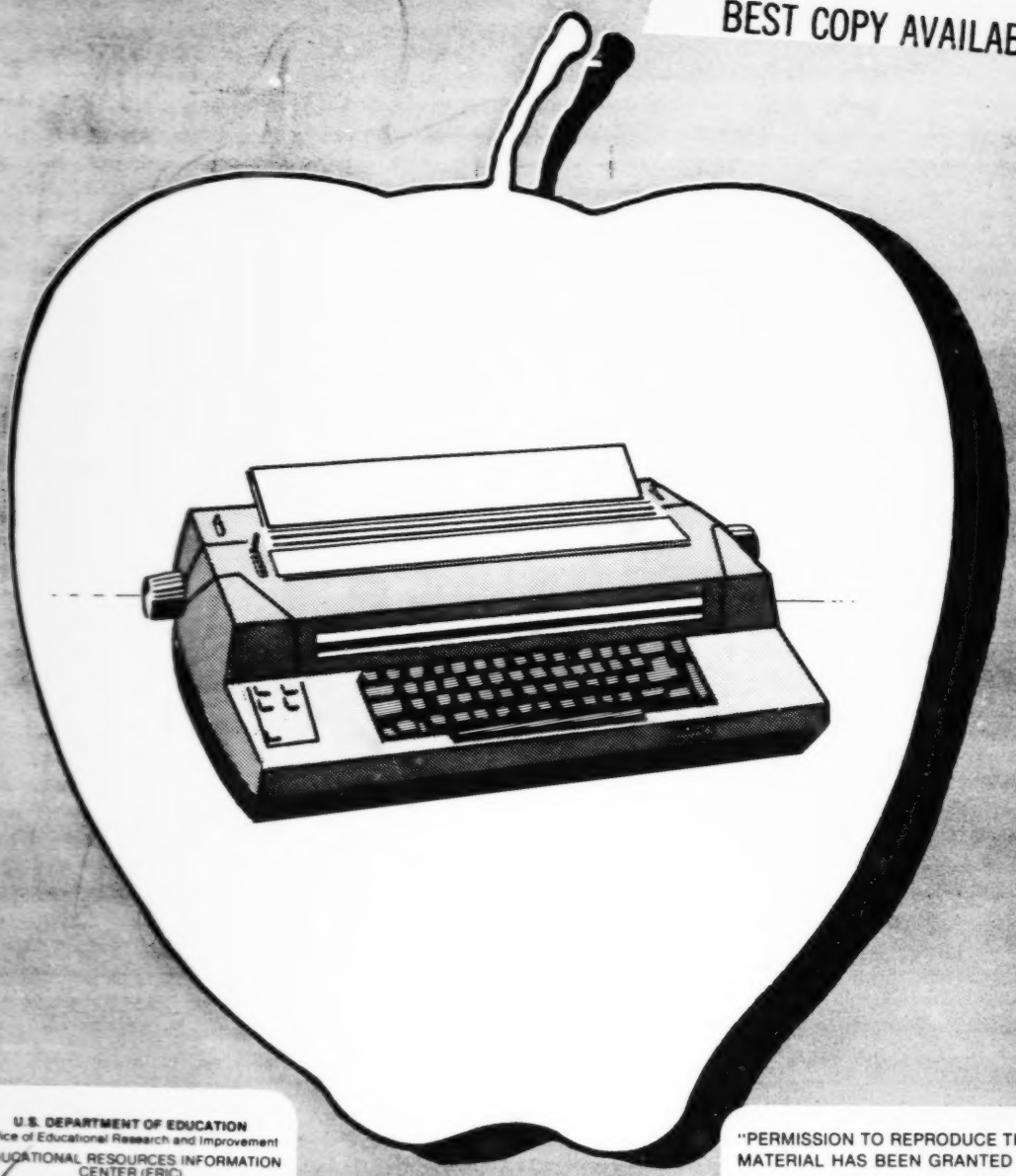

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SECRETARIAL AND OFFICE ADMINISTRATION

FIRST EDITION

1986

First printing--500 copies

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TYPING REVIEW

75.89(b)(1) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT--KEYBOARDING
SKILLS

TYPING

UNIT OBJECTIVE

The student will demonstrate the ability to apply basic typing techniques.

SPECIFIC OBJECTIVES

1. Identify the parts of the typewriter.
2. Demonstrate horizontal and vertical centering.
3. Define space lines and margins in inches for short, medium, and long letters and manuscripts.
4. Demonstrate the ability to perform basic typing techniques.

TEACHER ACTIVITIES

1. Display typewriter keyboard chart, business letter and manuscript charts.
2. Use transparencies to review basic typing techniques, including centering and margins.
3. Demonstrate correct typing posture and finger position.
4. Select activities from a typewriting or keyboarding textbook to reinforce typing skills.

STUDENT ACTIVITIES

1. Demonstrate the ability to:
   - A. Center a table vertically
   - B. Center a table horizontally
   - C. Figure margins for a short, medium and long letter
   - D. Type an envelope
   - E. Type a manuscript from rough draft using proofreaders' marks
   - F. Reinsert a page for corrections

EVALUATION-Unit Test

ESTIMATED COMPLETION TIME-5-20 hours

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section.

RESOURCES

AIR COUNTRY INTERNATIONAL
South-Western Publishing Company

CLERICAL TYPING PRACTICE SETS
  Church, SHADOW MOUNTAIN LODGE (interesting and motivational)
  Frisch, APPLIED OFFICE TYPEWRITING/4 (real-life training, 6-9 weeks)
  Archer, MODEL OFFICE PRACTICE SET/2 (broad overview)
  Wood, VOCATIONAL FORMS TYPING 1-15 (geared to individual progress)
  Wood, VOCATIONAL FORMS TYPING 16-30 (individual progress)
  Blendon, QUICK SURVEY COURSE IN FORMS TYPING, Facsimile Ed. (copying practice)
  Blendon, QUICK SURVEY COURSE IN FORMS TYPING, Standard Ed. (arrangement)
McGraw-Hill Book Company

CLERICAL OFFICE TYPING, LAP 1 (Centering and Tables)
CLERICAL OFFICE TYPING, LAP 2 (Business Forms)
CLERICAL OFFICE TYPING, LAP 3 (Memos, Letters, and Reports)
  Good for remedial work for students with weak basic typing skills.
South-Western Publishing Company

CLERICAL OFFICE TYPING, LAP 4 (Integrated Projects)
  Students "work" for four different businesses as employee of Youth Temps, Inc., a temporary help agency.
South-Western Publishing Company

SNOW COUNTRY TYPEWRITING PRACTICE SET
  Students complete 20 jobs as employee in three offices of Snow Country Skil Equipment, Inc.
South-Western Publishing Company

SPELLING: A MNEMONICS APPROACH
  Text-workbook
South-Western Publishing Company

TYPEWRITING OFFICE PRACTICE
Liberty Broadcasting Co.
South-Western Publishing Company

TYPEWRITING OFFICE PRACTICE
TOP Music Service, Inc.
  40 jobs (some take more than a class period to complete), heavy with legal typing
South-Western Publishing Company

WORD PROCESSING CONCEPTS
  Introduction to word processing--no special hardware required
South-Western Publishing Company

WORD PROCESSING-PEOPLE, MACHINES, AND PROCEDURES
  Discussion of people, machines, and procedures used in word processing
South-Western Publishing Company

75.89(b)(1)

OBJECTIVE: The student will demonstrate the ability to apply basic typing techniques.

	MASTERY	NON MASTERY
1. Identify the parts of the typewriter.		
2. Demonstrate horizontal and vertical centering.		
3. Define space lines and margins in inches for short, medium, and long letters and manuscripts.		
4. Demonstrate the ability to:		
A. Center a table vertically		
B. Center a table horizontally		
C. Figure margins for a short, medium, and long letter		
D. Type an envelope		
E. Type a manuscript from rough draft using proofreaders' marks		
F. Reinsert a page for corrections		
Unit Test		

PERFORMANCE CHART

I. GENERAL INFORMATION

A. This unit is designed to serve as a review of typing techniques for students who have not continuously used their typing skills.

B. This unit can also be used for students who have had only beginning typing.

II. UNIT OVERVIEW

A. It may not be necessary to cover all of the information in the Unit Overview.

B. The information begins with very basic information, such as parts of the typewriter.

C. The following basic techniques to be reviewed are covered:

1. Correct spacing
2. Horizontal centering
3. Vertical centering
4. Margins and spacing
5. Envelopes
6. Corrections

III. UNIT TEST

A. The unit test may be used as a pre-test to determine the length of time and information to be presented in the unit.

B. The unit test may be used at the conclusion of the unit.

I. PARTS OF THE TYPEWRITER

A. On/off key--controls electric power to typewriter

B. Paper guide--guides the paper in the typewriter

C. Paper bail--holds paper against platen (cylinder)

D. Paper release--allows paper to be removed or aligned; permits thick carbon packs to be inserted

E. Dual-pitch lever--changes type to either 10- (pica) or 12- (elite) pitch type

F. Margin scale--indicates the line of writing when setting margins, tab stops, and in horizontal centering

G. Line-space selector--moves paper up 1 (single), 2 (double), or 3 (triple) spaces

H. Margin set--sets right and left spacing

I. Margin release--allows temporary release of the margins

J. Tab control--sets and clears tab stops

K. Multiple copy control--adjusts the position of the cylinder to allow for the thickness of materials inserted in the typewriter

L. Impression control--adjusts the striking force of the key

M. Typing element--metal ball with letters which imprint when keys are depressed

N. Left and right shift keys--change type to capital letters

O. Backspace key--moves the carriage rapidly backward on the typing line

P. Page-end indicator--determines how many inches remain from the bottom of the page

Q. Shift lock--provides continuous typing in capital letters

R. Paper centering scale--sets paper guide at desired position and indicates the center of the paper

S. Correcting key--allows removal of incorrect type

T. Cardholder--holds paper, cards, envelopes close to platen

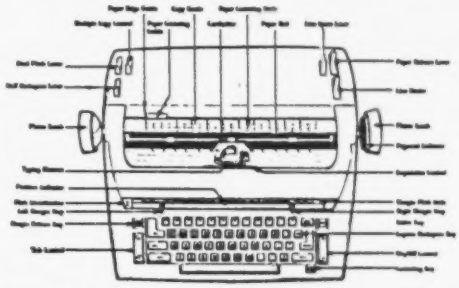
U. Variable line spacer--changes writing line setting or realigns the writing line for corrections

V. Line finder--changes line spacing temporarily, then refinds the line

W. Half-backspace--inserts a character, or creates a character consisting of two or more letters joined together

X. Sound reduction cover--reduces the typing noise by placing the plastic over over the keys or element on the typewriter

PARTS OF A TYPEWRITER



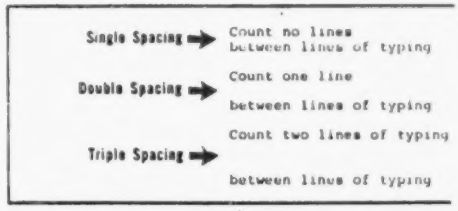
II. CORRECT SPACING

Line-space selector may be set (1) for single spacing; (2) for double spacing; and (3) for triple spacing. The differences between the spacing are:

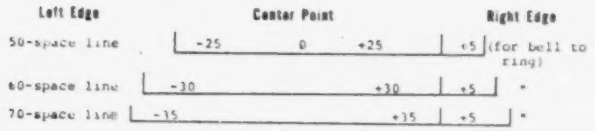
A. Single-spacing--typing on every line. When counting the lines for centering vertically, do not count any lines between the line of writing.

B. Double-spacing--typing on every other line. When counting the lines for centering vertically, count one between each line of writing.

C. Tripe-spacing--typing on every third line. When counting the lines for centering vertically, count two between each line of writing.


Single Spacing
Count no lines between lines of typing
Double Spacing
Count one line between lines of typing
Triple Spacing
Count two lines of typing between lines of typing

	Pica	Elite	Used for
50-space line	17 and 72	26 and 81	Short letters, short themes, short book reports
60-space line	12 and 77	21 and 86	Long letters and long themes
70-space line	7 and 82	16 and 91	Timed writings
1-inch margins	10 and 80	12 and 95	Manuscripts
1 1/2-inch margins	15 and 80	18 and 96	Left-bound manuscripts
Spaces to an inch	10	12	
Lines to an inch	6	6	
Spaces horizontally on page 8 1/2 x 11	66	66	
Horizontal center	42	51	



III. MARGINS

To set margins for any length line:

A. Divide the number of spaces in the line by two and subtract the quotient from the center that you are using. This is the left margin.

B. Add the same number to the center, plus five for bell, to determine the right margin.

To set margins for any length line if paper guide is even with outside edge of left bracket:

50-space line -25 0 +25 +5 (for bell to ring)

60-space line -30 +30 +5

70-space line -35 +35 +5

IV. CENTERING A LINE HORIZONTALLY

A. Count the total strokes in the line.

B. Place the carriage at center position.

C. Backspace once for every two strokes (including spaces between words, if any).

D. Start typing the line at this point.

V. CENTERING VERTICALLY

A. Count the number of lines to be used (for double or triple spacing, be sure to count the skipped lines).

B. Subtract the above number from 66 (number of lines on an 8 1/2 x 11 paper).

C. Divide the above number by 2, and add 1.

D. Space down the above number of lines.

E. Start typing.

F. Reading position is a slightly higher placement on a sheet. Follow the above steps, but at the end, subtract 2 instead of adding 1.

VI. SYMBOLS, ABBREVIATIONS, NUMBERS, ETC.

A. Leave no space

1. Before, between, or after a dash
2. Before or after a hyphen
3. Between a number and the ¢ sign
4. Between a whole number and a machine-made fraction such as 1/2 and 1/4
5. Between quotation marks and the material quoted
6. Before or after an apostrophe with word
7. Between the $ sign and the number that follows
8. Between a number and the % sign
9. Between the # (number) and the # (pounds) sign that follows

B. Space once

1. After a comma
2. After a semicolon
3. After a period that follows an abbreviation (but place periods without spaces in abbreviations like a.m., p.m., C.O.D., and F.O.B., and use no space or periods in such commonly used abbreviations as FBI, CIA, SEC, MIA, and POW).
4. After an exclamation point within a sentence
5. After a question mark within a sentence
6. Before and after the & sign
7. Before and after the @ sign
8. Between a whole number and a fraction made with a diagonal such as 1 2/6
9. Before and after each leader in an ellipsis or in a table of contents

C. Space twice

1. After the end of sentence punctuation marks (question mark, period, and exclamation mark)
2. After a colon within a sentence with the exception in stating time
3. After periods which follow divisions of an outline

TEST FOR REVIEW OF TYPING TECHNIQUES

1. Complete the following statements about the typewriter by writing the correct word or words in the blanks.

   a. Place material at the _____ of the typewriter, elevated on the book stand.

   b. Position typewriter with the front of the frame even with front edge of _____.

   c. Fingers should be curved over the _____ _____ _____.

   d. Eyes should be on the _____.

   e. _____ should be low and relaxed.

   f. Body should be _____ and back in the chair.

   g. _____ should be flat on the floor.

2. Point out the correct uses of the parts of the typewriter by writing TRUE or FALSE in the blanks at the left.

   _____ a. The on/off key controls electric power to typewriter.

   _____ b. Page-end indicator is used to guide the paper straight into the typewriter.

   _____ c. Paper bail is used to hold the paper flat on the cylinder (platen).

   _____ d. The cylinder variable is used to reposition the paper after it is inserted in the typewriter. Used also when inserting a thick carbon pack and when removing paper from the typewriter.

   _____ e. The dual-pitch lever is used to type in either 10- or 12-pitch, meaning pica or elite type.

   _____ f. Margin/pitch scale is used to indicate the position of the typing element.

   _____ g. The line finder is used either to double space or single space.

   _____ h. Margin stops are used to set right and left margins.

   _____ i. The margin release key is used to release the margins temporarily.

   _____ j. The tab control is used to set and clear tabs.

   _____ k. Impression control is used to adjust the position of the cylinder to take care of the thickness of typing material.

   _____ l. Multi-copy control is used to adjust the striking force.

   _____ m. Typing element is the metal ball with letters which imprint when keys are depressed.

   _____ n. Shift keys are used to type capital letters.

   _____ o. The shift lock is used to continuously type capital letters.

   _____ p. The express backspace key is used to move rapidly backward on the typing line.

   _____ q. Paper-edge guide is used to determine how many inches from the bottom of the page.

TEST

_____ r. The paper centering scale is used to find the center of the paper.

_____ s. The correcting key is used to correct errors.

_____ t. A cardholder is used to hold paper, cards, and envelopes close to cylinder.

_____ u. The paper release is used to permanently change the line of writing or to realign a page for corrections.

_____ v. The line space lever is used to leave the original typing line temporarily

_____ w. Half-backspace lever is used to squeeze two letters into one space.

_____ x. A sound reduction cover is used to reduce the typing noise.

3. Identify the types of spacing by writing the number of each in the correct blank on the left.

_____ a. Leaving two blank lines between the line of writing

_____ b. Typing on every line

_____ c. Typing on every other line

1. Single-spacing
2. Double-spacing
3. Triple-spacing

4. Show the differences in spacing when using elite and pica type.

	Pica	Elite
Horizontal center on 8 1/2 x 11 page	_____	_____
Vertical line on 8 1/2 x 11 page	_____	_____
Horizontal spaces on 8 1/2 x 11 page	_____	_____
Vertical lines to an inch	_____	_____
Horizontal spaces to an inch	_____	_____
1 1/2-inch margins	_____	_____
1-inch margin	_____	_____
70-space line	_____	_____
60-space line	_____	_____

5. Give the directions for figuring a 40-space line on elite type if paper guide is at 0 and page is 8 1/2 x 11.

_____

_____

_____

6. Give the starting space when centering "Roget's International Thesaurus" using elite type and typing on an 8 1/2 x 11 page.

7. What is the difference between exact vertical center and reading position?

_____

_____

8. On what line do you start typing when you are centering vertically on a full-page 26 lines of material?

_____

9. Fill in the blanks with 0-1-2 spaces.

_____ a. After the end of sentence punctuation marks (question mark, period, and exclamation point)

_____ b. Between a whole number and a machine-made fraction such as 1/2 or 1/4

_____ c. Between quotation marks and the material quoted

_____ d. After an exclamation point within a sentence

_____ e. Between the $ sign and the number that follows

_____ f. After a period that follows an abbreviation (but place periods without spaces in abbreviations like a.m., p.m., C.O.D., and F.O.B., and use no space or periods in such commonly used abbreviations as FBI, CIA, SEC, Mia, and POW)

_____ g. After a semicolon

_____ h. After a colon within a sentence with the exception in stating time

_____ i. Between a number and the % sign

_____ j. Before, between, or after a dash

_____ k. After a comma

_____ l. After a question mark within a sentence

_____ m. After periods which follow divisions of an outline

_____ n. Before and after the & sign

_____ o. Before or after an apostrophe within a word

_____ p. Before and after the @ sign

_____ q. Between a whole number and a fraction with a diagonal such as 1 2/6

_____ r. Between the # (number) sign and the number that follows

_____ s. Between a number and the # (pounds) sign that follows

_____ t. Before and after each leader in an ellipsis or in a table of contents

_____ u. Before or after a hyphen

_____ v. Between a number and the ¢ sign

_____ w. Between parenthesis and the material enclosed

10. Determine whether you spell out or write in figures for each of the following by writing sp or fig in each of the blanks.

_____ a. Numbers from one to ten unless used with other numbers above ten

_____ b. Measure such as feet and inches

_____ c. When a number starts a sentence

TEST

_____ d. Weights such as pounds and ounces

_____ e. Distance such as miles and blocks

_____ f. Single fraction within a sentence

_____ g. Series of fractions within a sentence

_____ h. The number following volume, section, and pages

_____ i. Numbers stating dollars and cents

_____ j. When two numbers are used together

_____ k. Percentage and decimals in approximations and formal writing

_____ l. Hour and minutes

_____ m. Approximate age in years

_____ n. Exact age in years, months, and days

_____ o. House numbers except the number one

_____ p. Numbers below ten in avenues and streets

11. Place an "X" in the blank beside each of the following that should be capitalized.

_____ a. First word of each sentence

_____ b. Second word in the complimentary close

_____ c. First word after a colon if the word begins a complete sentence

_____ d. Geographic regions

_____ e. Street, avenue, and company used as proper nouns

_____ f. All names of educational courses used in sentences

_____ g. Names of the days of the week, months, holidays, and historic events

_____ h. First word and all important words in titles of books, periodicals, headings, plays, articles, etc.

_____ i. Words such as and, but, or, if or to in the titles of books

_____ j. An official title if it precedes a name

_____ k. Proper nouns

_____ l. Business titles used without the name of a person

_____ m. Names of organizations, clubs, etc.

12. Write the number of spaces to be used after each of the following:

_____ a. Period at the end of a sentence

_____ b. Period after abbreviations

_____ c. Comma used to set off words of direct address

_____ d. Comma used to set off an introductory phrase

_____ e. Comma used to set off a parenthetical expression

_____ f. Comma used before a short direct quotation

_____ g. Comma used to separate the day from the year

_____ h. Comma used to separate adjectives

_____ i. Comma used to separate unrelated groups of figures

_____ j. Exclamation mark used after emphatic interjections or exclamatory phrases or sentences

_____ k. Question mark used after a direct question

_____ l. Dash used in a sentence

_____ m. Colon used to introduce an enumeration or a listing, a long direct quotation, or a question

_____ n. Colon used between hours and minutes

_____ o. Hyphen used to join compound numerals, compound adjectives, and a series of hyphenated words having the same ending

_____ p. Parentheses used to enclose parenthetical or explanatory matter, letters or figures for enumerated items, and figures to clarify written words

_____ q. Quotation marks to enclose a direct quotation and to enclose the title of an article

_____ r. Semicolon used to separate parts of a compound sentence, when the parts of a compound sentence are joined by a conjunctive adverb, and to separate a series of phrases or clauses when introduced by a colon

_____ s. Apostrophe used as a symbol for feet, omission of figures and letters, to show plurality, and to show possession

13. Fill in the words to complete the rules for word division.

a. Divide a word between _____.

b. Avoid dividing a word with _____ or fewer letters.

c. Avoid dividing a word with _____-letter syllable at the beginning or end of a word.

d. Avoid dividing a syllable with a _____.

e. Avoid dividing a _____-letter syllable at the end of a word or at the beginning of a word.

f. Avoid dividing initials, numbers, abbreviations, and proper names. A _____ may be separated from the initials or given name.

g. Divide after a _____-letter syllable within a word, unless it is followed by "ble," "cle," or "cal."

h. If the final consonant in a word is double when a suffix is added, divide between the _____.

i. Divide a hyphenated or compound word only at the _____.

j. If dividing parts of the date is necessary, separate between the _____ _____ and _____.

k. Avoid dividing words on more than _____ successive lines.

l. Avoid dividing the final word on a _____.

TEST

ANSWERS TO TEST FOR REVIEW OF TYPING TECHNIQUES

1. a. Right side
   b. Desk
   c. Home row keys
   d. Copy
   e. Wrists
   f. Erect
   g. Feet

2. a. True
   b. False
   c. True
   d. False
   e. True
   f. True
   g. False
   h. True
   i. True
   j. True
   k. False
   l. False
   m. True
   n. True
   o. True
   p. True
   q. False
   r. True
   s. True
   T. True
   u. False
   v. False
   w. True
   x. True

3. a. C
   b. A
   c. B

4.

Pica	Elite
42	51
66	66
85	102
6	6
10	12
15, 75	18, 89
10, 80	12, 95
7, 82	16, 91
12, 77	21, 86

5. The center is 51. Ad 20 (1/2 of 40 space line) to 51 and add 5 spaces for the bell for the right margin. Subtract 20 from 51 for the left margin. Margins are 31, 76.

6. 36

7. Reading position is 2 lines above exact center.

8. 21

9. a. 2
   b. 0
   c. 0
   d. 1
   e. 0
   f. 1
   g. 1
   h. 2
   i. 0
   j. 0
   k. 1
   l. 1
   m. 2
   n. 1
   o. 0
   p. 1
   q. 1
   r. 0
   s. 0
   t. 1
   u. 0
   v. 0
   w. 0

10. a. sp
    b. fig
    c. sp
    d. fig
    e. fig
    f. sp
    g. fig
    h. fig
    i. fig
    j. sp
    k. sp
    l. fig
    m. sp
    n. fig
    o. fig
    p. sp

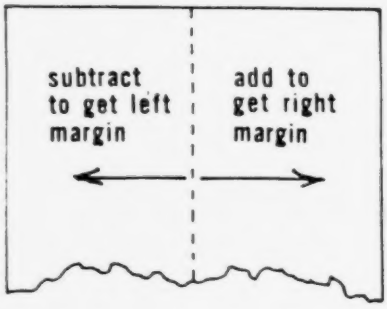
11.

a.	X	h.	X
b.		i.	
c.	X	j.	X
d.	X	k.	X
e.	X	l.	
f.		m.	X
g.	X		

12. a. 2
    b. 1
    c. 1
    d. 1
    e. 1
    f. 1
    g. 1
    h. 1
    i. 1
    j. 2

13. a. syllables
    b. five
    c. one
    d. vowel
    e. two
    f. surname
    g. one
    h. double letters
    i. hyphen
    j. day and year
    k. two
    l. page

MARGINS - ELITE AND PICA



For an elite machine with 50 as center

50 space line		60 space line		70 space line	
50 divided by 2=25		60 divided by 2=30		70 divided by 2=35	
50	50	50	50	50	50
-25	+ 25	- 30	+ 30	- 35	+ 35
25	+ 5 bell	20 L	+ 5	15 L	+ 5
Left Margin	80 Right Margin		85 R		90 R

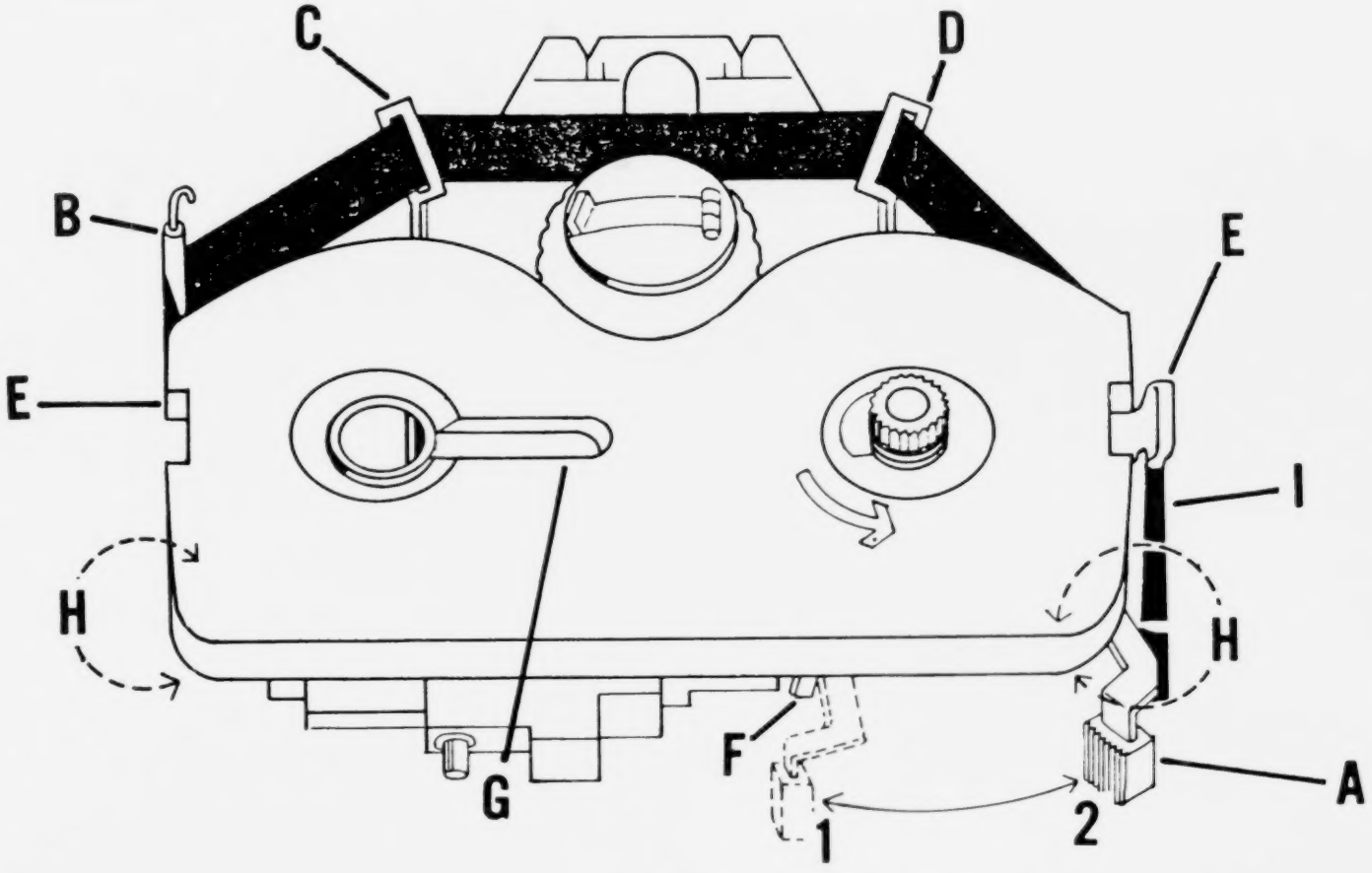
4 inch line = 4 × 12 = 48 = 50 space line
5 inch line = 5 × 12 = 60 space line
6 inch line = 6 × 12 = 72 = 70 space line

For a pica machine with 42 as center:

50 space line		60 space line		70 space line	
50 divided by 2 = 25		60 divided by 2 = 30		70 divided by 2 = 35	
42	42	42	42	42	42
- 25	+ 25	- 30	+ 30	- 35	+ 35
17 L	+ 5 bell	12 L	+ 5	7 L	+ 5
	72 R		77 R		82 R

4 inch line = 4 × 10 = 40 space line
5 inch line = 5 × 10 = 50 space line
6 inch line = 6 × 10 = 60 space line

CHANGING TYPEWRITER CARTRIDGES

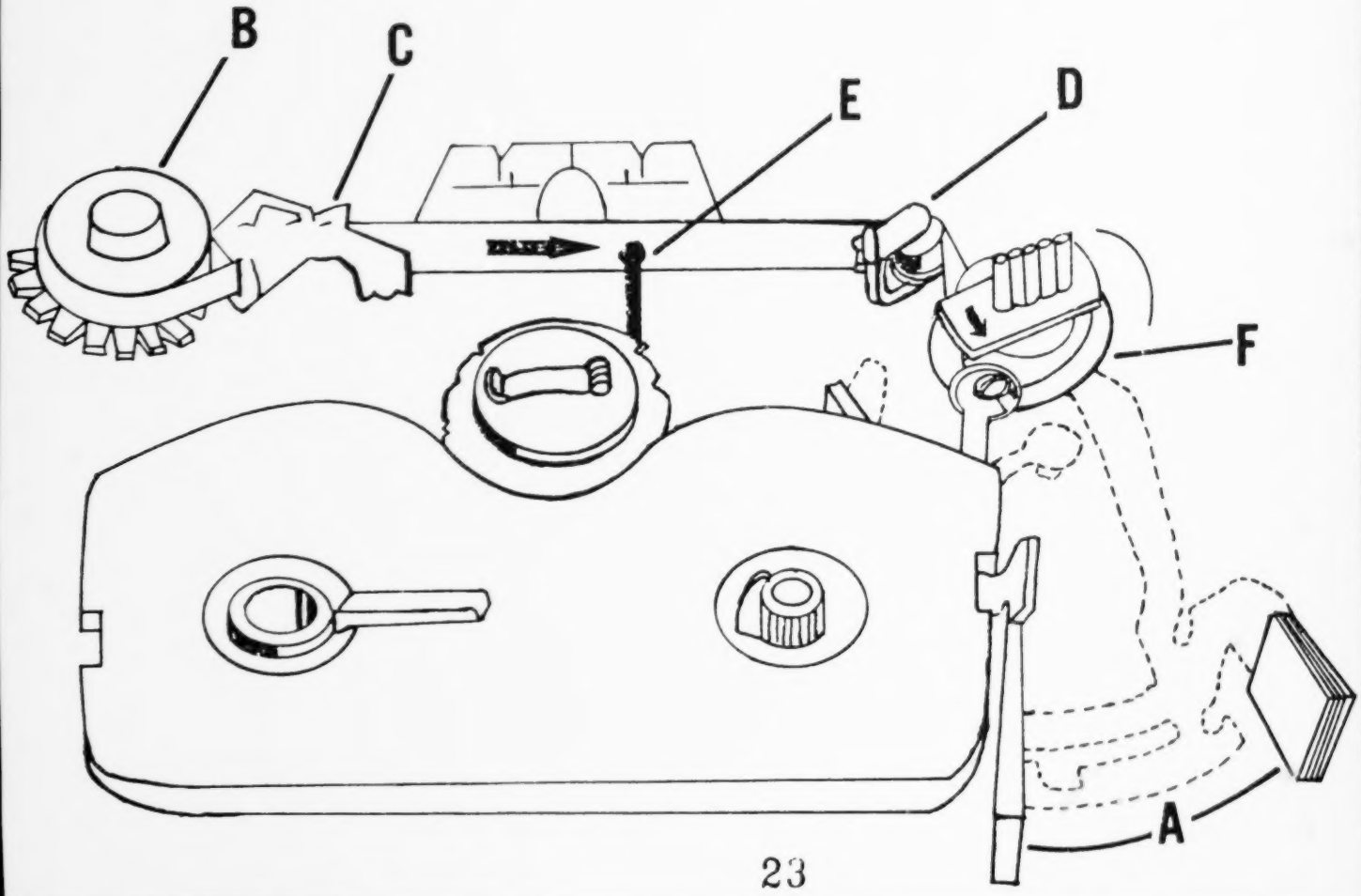


21

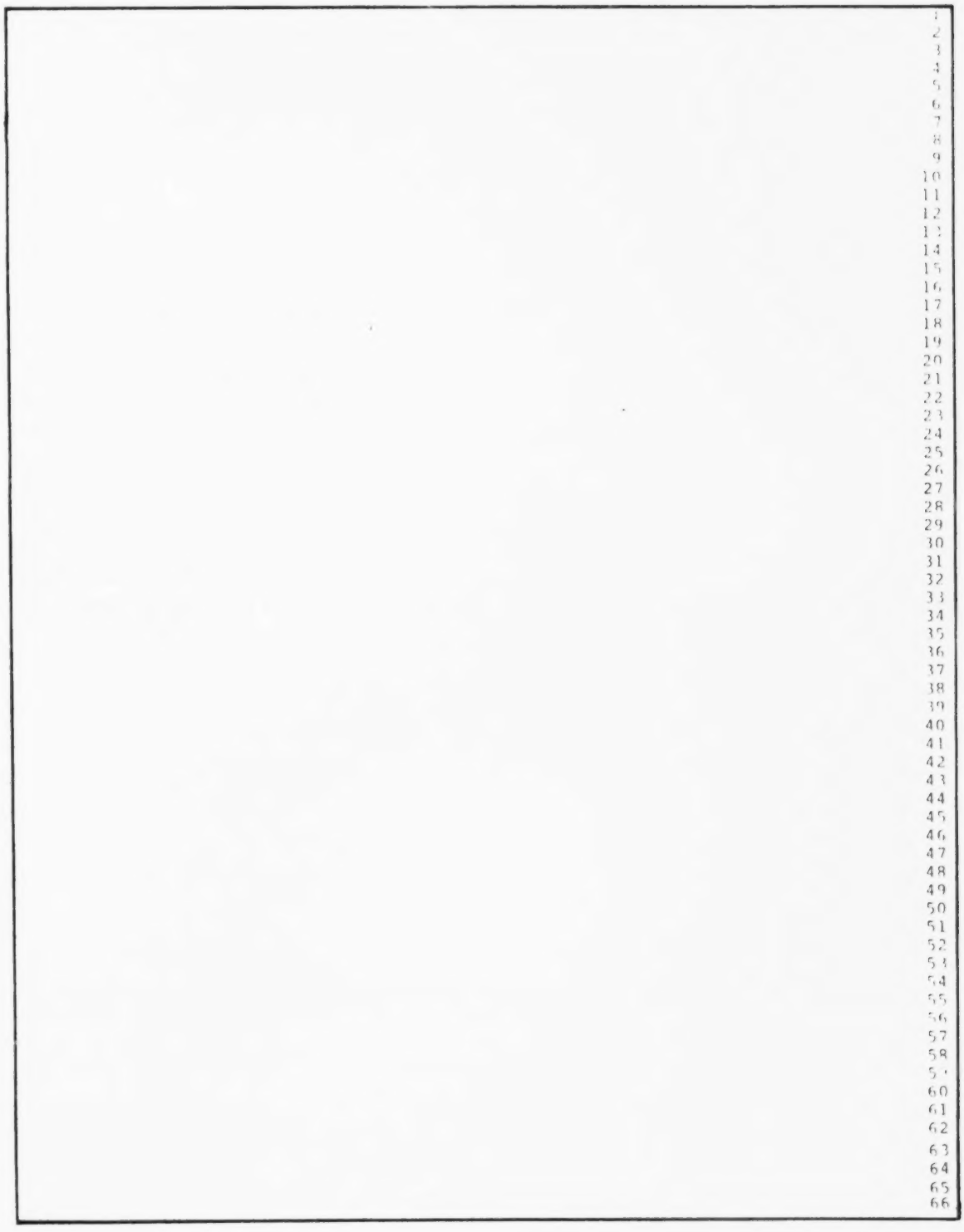
22

19

CHANGING TYPEWRITER CORRECTING TAPE



NUMBER LINE BACKING SHEET



PROOFREADING

75.89(b)(1)(a) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT
KEYBOARDING SKILLS

Recognize proofreader's marks and use them in editing

PROOFREADING

UNIT OUTLINE

UNIT OBJECTIVE

The student will be able to recognize proofreader's marks and use them in editing.

SPECIFIC OBJECTIVES

1. List characteristics of a good proofreader.
2. Identify types of errors.
3. Identify steps in proofreading.
4. Demonstrate the ability to:
   a. Proofread and recognize errors.
   b. Edit typewritten work using the proper proofreader's marks.

TEACHER ACTIVITIES

1. Gather resources and references.
2. Order slide/tape presentation, Recognizing Proofreader's Marks and Using Them in Editing, OCL.
3. Discuss unit objectives.
4. Discuss the importance of proofreading.
5. Select proofreading materials from one of the resources listed on the back of this sheet.

STUDENT ACTIVITIES

1. See slide/tape presentation.
2. Complete Activities 1 and 2, Typing, OCL.
3. Complete activites with slide/tape presentation.

EVALUATION --Unit Test

ESTIMATED COMPLETION TIME --4 hours

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section

RESOURCES

APPLIED SECRETARIAL PROCEDURES
Gregg/McGraw-Hill Book Co.

ENGLISH STYLE SKILL-BUILDERS
Gregg/McGraw-Hill

OFFICE PROCEDURES
MPC Educational Publishers

PROOFREADING
Glencoe Publishing Co.
text/workbook

RECOGNIZING PROOFREADER'S MARKS AND USING THEM IN EDITING
Occupational Curriculum Laboratory
East Texas State University

THE REFERENCE GUIDE
Houghton-Mifflin Company

SECRETARIAL PROCEDURES AND ADMINISTRATION
South-Western Publishing Co.

TECHNIQUES FOR PROOFREADING AND MAKING CORRECTIONS
MPC Educational Publishers

THE WP BOOK, A REFERENCE MANUAL
John Wiley and Sons, Inc.

75.89(b)(1)(A)

OBJECTIVE: The student will be able to recognize proofreader's marks and use them in editing.

	MASTERY	NON MASTERY
1. List characteristics of a good proofreader.		
2. Identify types of errors.		
3. Identify steps in proofreading.		
4. Demonstrate the ability to:		
a. Proofread and recognize errors.		
b. Edit typewritten work using the proper proofreader's marks.		
UNIT TEST		

PERFORMANCE CHART

I. PREPARATION FOR UNIT

A. Preview the unit. Gather resources and references, if necessary, to supplement the unit.

B. Order slide/tape presentation, Recognizing Proofreader's Marks and Using Them in Editing.

C Design a bulletin board to introduce the unit.

II. OBJECTIVE SHEET

A. Discuss the unit and specific objectives.

B. Add objectives for any information added to the unit.

III. UNIT OVERVIEW AND ACTIVITY SHEETS

A. Discuss the importance of proofreading.

B. Emphasize the types of errors to look for and the steps to follow in proofreading.

C. Stress the importance of using resources and references.

D. Show slide/tape presentation, Recognizing Proofreader's Marks and Using Them in Editing.

E. Have students complete the activities at the end of the unit. For extra practice, the activities provided with the slide/tape presentation may be duplicated and completed.

IV. SUPPLEMENTARY ACTIVITIES

A. Many materials are available to provide additional exercises in proofreading.

B. If electronic typewriters and word processors are available, this is an opportunity for valuable practice.

NOTES TO THE INSTRUCTOR

I. CHARACTERISTICS OF A GOOD PROOFREADER

A. Good spelling skills

B. Knowledge of correct grammar

C. Ability to use resources and references

D. Close attention paid to detail

E. Pride in producing accurate work

F. Understanding of proofreader's marks

II. TYPES OF ERRORS

A. Mechanical

1. Inverted letters

2. Incorrect letters

3. Missing letters

4. Incorrect spacing

B. Missing words or lines

C. Incorrect spelling

D. Capitilization and punctuation

E. Word division

F. Author's writing

1. Incorrect numbers, dates, and figures

2. Poor format

3. Poor grammar

4. Poor content

III. PROOFREADING AND EDITING HINTS

A. Proofread a final copy before removing it from the typewriter.

B. Remove a rough draft copy from the typewriter to proofread and edit.

C. Use a pen, pencil, or the forefinger as a guide when proofreading.

D. Take your time and concentrate.

E. Use a dictionary and/or reference manuals.

F. Use proofreader's marks to indicate needed changes and corrections.

G. Make notes in the margin as you proofread.

H. Ask the author if you have any questions.

I. Double-check figures carefully against the handwritten or dictated document.

J. Proofread names and unfamiliar terms letter by letter.

IV. TYPES OF RESOURCES AND REFERENCES REQUIRED

A. Dictionary

B. Word finder book

C. Reference guide or manual for clerical workers

D. Grammar book

V. STEPS IN PROOFREADING

A. Read through the entire document, checking for:

1. Placement

a. Attractive placement on the page

b. Correct margins

2. Format

a. Correct sequence of necessary parts

b. Logical sequence of information and clear presentation

c. Only one subject addressed in each paragraph

3. Content

a. Inclusion of all necessary information

b. Any omissions of letters, words, and phrases that could change the meaning of the document

c. Accuracy of any figures or facts that could affect the outcome of any action to be taken

(NOTE: Always double-check.)

4. Neatness of the document

A. Corrections not noticeable

b. No smudges or fingerprints on pages

c. Pages free of creases or wrinkles

b. Strike the key which made the error.

(NOTE: The correcting ribbon lifts the error off the page.)

c. Strike the key to reinsert the correct letter in the space.

d. Correct the carbon copy, if there is one, by using an eraser.

D. Electronic typewriters, word processors, and microcomputers

1. Follow procedures given in machine manual for error correction.

2. Error correction on these machines is much simpler and can be done before the document is stored and printed.

3. If corrections and revisions are necessary after the document is printed, it can be recalled, corrected, and reprinted.

4. Editing and document revision will be studied in depth in the word processing unit.

II. OTHER CORRECTING TECHNIQUES

A. Reinserting and aligning paper

1. Sometimes an error is found after the paper has been removed from the typewriter. This means that the error must be removed and the paper placed back in the typewriter and correction made. The process of reinserting the paper and aligning it can be made easier with a little practice.

2. Follow the steps below when correcting an error and reinserting the paper in the typewriter.

a. Remove the error, using correction fluid.

b. Reinsert the paper into the typewriter.

c. Realign the paper by using the line of typing on the paper and the markings on the card holder as a guide.

d. Use an "i" or an "l" to line up with the vertical line at the top of the card holder.

e. Use the paper release to make it possible to move the paper when lining up the paper vertically.

f. Use the horizontal line across the card holder to line up the base of the typing line.

g. Use the platen knob to set the position of the typing line.

h. Type in the correction.

B. Squeezing in letters

1. After a paper has been removed from the typewriter, you may find when reading through the paper that a letter needs to be added to a word. Rather than retype the page, squeeze in the letter if there is space available.

2. Follow the steps listed when squeezing in a letter:

a. Realign the paper following the steps listed above.

b. Pull the half-space lever forward until the vertical line at the top of the card holder is over the space desired.

c. Hold the lever forward and type in the letter.

d. Release the lever and remove the paper from the typewriter.

(NOTE: If your typewriter does not have a half-space lever, ask your teacher to demonstrate the procedure for the typewriter you are using.)

B. Check each line of the document for:

1. Spelling

   a. Check spellings of names and places.

   b. Use a reference book to check all unfamiliar words and words the spelling of which you are unsure.

2. Typographical content

   a. Check for transposed letters or words.

   b. Watch for letters added or deleted from words and for spaces added or deleted between words.

3. Word division

   a. Scan the right margin for words that have been divided, and check these items in a word division manual.

   b. Look for parts of words that might appear at the end of one line and are repeated at the beginning of the next line.

4. Punctuation

   a. Check to see that punctuation rules have been followed.

   b. Use a reference manual or grammar book to double-check something that is questionable.

5. Grammar

   a. Be sure that the subject and verb in a sentence are in agreement.

   b. Check for incomplete sentences.

   c. Make sure that the correct form of a word has been used (for example, to, too, two).

PROOFREADER'S MARKS

Insert ∧	Move to the left ←
Transpose ∩	Move to the right →
Delete ⁄	Spell out ⬭
Do not delete	Single space ss
Capitalize ≡	Double space ds
Lower case lc	New paragraph ¶
Insert punctuation ⊙	Center on page →←
Bring together ⌒	No paragraph ⌒
Leave a space #	

CORRECTING ERRORS

75.89(b)(1)(B) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT
KEYBOARDING SKILLS

Select appropriate tools for correcting and use them correctly

CORRECTING ERRORS

UNIT OUTLINE

UNIT OBJECTIVE

The student will be able to select the appropriate tools in correcting errors and use them correctly.

SPECIFIC OBJECTIVES

1. List four tools for correcting errors.
2. List two correcting techniques.
3. Identify procedures involved in using tools and techniques for correcting errors.
   a. Reinsert and align copy and correct errors.
   b. Correct an error and squeeze in letters.
4. Demonstrate error correction and revision techniques on electronic typewriter, word processors, and microcomputers if available.

TEACHER ACTIVITIES

1. Gather appropriate correcting tools for students to use.
2. Discuss unit and specific objectives.
3. Demonstrate methods of correction.
4. Provide examples of corrections made incorrectly.

STUDENT ACTIVITIES

1. Discuss methods of correction.
2. Demonstrate correcting errors on the correcting selectric typewriter, electronic typewriter, word processors, and microcomputers.
3. Demonstrate correcting errors by realignment and squeezing letters.

EVALUATION-Unit Test

ESTIMATED COMPLETION TIME

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section.

RESOURCES

CLERICAL OFFICE PROCEDURES
Southwestern Publishing Co.

TECHNIQUES FOR PROOFREADING AND MAKING CORRECTIONS
Milady Publishing Co.

TYPEWRITING: A MASTERY APPROACH, ADVANCED COURSE
Science Research Associates, Inc.

TYPING I, GENERAL COURSE, SERIES 6
Gregg/McGraw-Hill Co.

75.89(b)(1)(B)

OBJECTIVE: The student will be able to select the appropriate tools in correcting errors and use them correctly.

	MASTERY	NON MASTERY
1. List four tools for correcting errors.		
2. List two correcting techniques.		
3. Identify procedures involved in using tools and techniques for correcting errors.		
a. Reinsert and align copy and correct errors.		
b. Correct an error and squeeze in letters.		
4. Demonstrate error correction and revision techniques on electronic typewriter, word processors, and microcomputers if available.		
5. Demonstrate correcting errors by realignment and squeezing letters.		
UNIT TEST		

PERFORMANCE CHART

I. PREPARATION FOR UNIT

A. Gather appropriate correcting tools for students to use.

B. Gather additional resources and references for use with this unit, such as typing textbook, typewriter manual.

C. Design a bulletin board introducing the unit. You may include samples of work showing the wrong and right way of correcting an error, pictures of correction tools, etc.

II. OBJECTIVE SHEET

A. Discuss the unit and specific objectives.

B. Add objectives for any information added to the unit.

III. UNIT OVERVIEW

A. Discuss and demonstrate each of the methods of correction.

B. Stress the importance of making neat corrections.

C. Provide examples of corrections made incorrectly.

D. Demonstrate correction and revision techniques on electronic typewriter, word processor, and microcomputer if available.

I. TYPES OF CORRECTING TOOLS

There are four ways to make corrections. You should become familiar with all of the methods discussed in this unit so that you will be able to use the method used most often in the office where you work.

A. Correction fluid

1. This is the most commonly used method of correcting errors. The fluid is usually white but may now be purchased in several different colors. If used properly, the correction fluid rarely leaves a trace of the correction made.

2. The bottle of correction fluid comes with a small brush attached to the cap with which to apply the fluid. When not being used, the cap should be kept tightly closed so the fluid will not dry out.

3. To make a correction using the correction fluid, follow these steps:

   a. Roll the paper up for easy access to the area where the error was made.

   b. Wipe the brush against the mouth of the bottle to remove any excess fluid from the brush.

      HINT: This keeps the liquid from dropping onto the paper and smearing.

   c. Use the tip of the brush to dot out the letter(s) in the error.

      HINT: Apply the liquid in a dotting motion to outline each letter to be corrected. The fluid will dry faster, will not cake on the paper, and will not turn gray.

   d. Realign the paper and type in the correction.

4. Do not use the correction fluid to white-out words or sentences on a page. This takes away from the neat appearance of your work. Retype the page if necessary.

B. Correction tape or paper

1. This method of correcting errors is also simple and fast, but corrections are not as neat, and the tape does not always remove all of the error.

2. Correction tape may be purchased in a small roll or in small sheets of paper. The back of the tape or paper is covered with a white chalky substance which covers the error(s) corrected.

3. To make a correction using the correction tape or paper, follow these steps:

   a. Realign the typewriter line to the line where the error is to be corrected.

   b. Place the correction tape or paper between ribbon and the paper with the chalky side of the tape facing the paper.

   c. Strike the key which made the error.

   d. Remove the tape and backspace. Strike the key to reinsert the correct letter in the space.

C. Self-correcting

1. Electric typewriters may now be purchased with a special correcting ribbon as an extra feature. The key makes the correction of errors simple, neat, and fast. More and more offices are purchasing typewriters with correcting keys because this feature saves time and makes neat corrections.

2. To correct an error using the self-correcting key, follow these steps:

   a. Depress the correction key.

      NOTE: This will backspace and engage the correcting ribbon.)

MAILABLE LETTERS

75.89(b)(1)(C) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT
KEYBOARDING SKILLS

Demonstrate procedures necessary in preparing mailable letters, envelopes, and packages

MAILABLE LETTERS

UNIT OBJECTIVE

The student will be able to apply procedures in preparing mailable letters and envelopes. This will be evidenced through demonstration and successful completion of the unit test.

SPECIFIC OBJECTIVES

1. Identify types of letter styles.
2. Define open and mixed punctuation.
3. Identify standard margins.
4. List the eight basic parts of a business letter.
5. Identify special parts of a business letter.
6. List the U.S. Government Regulations for format style when preparing envelopes.
7. Give the sequencing order for the destination address on an envelope.

TEACHER ACTIVITIES

1. Display posters of letter styles and parts of a letter.
2. Duplicate letters provided with this unit for discussion of mailable letters.
3. Gather copies of actual business letters for a bulletin board display.
4. Use transparencies to explain letter styles and formats.

STUDENT ACTIVITIES

1. Prepare mailable letters using various letter styles.
2. Prepare envelopes according to U.S. Postal regulations.
3. Demonstrate knowledge of criteria for mailable letters.

EVALUATION-Unit Test

ESTIMATED COMPLETION TIME

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section

RESOURCES

BASIC LETTER AND MEMO WRITING
text-workbook
South-Western Publishing Company

BUSINESS LETTER STYLE
posters/transparencies
Milady Publishing Company

CLERICAL OFFICE PROCEDURES, 6th ed.
South-Western Publishing Co.

COLLEGE TYPEWRITING, 10th ed.
South-Western Publishing Co.

MAILABLE LETTERS
text-workbook
Gregg/McGraw-Hill

OFFICE PROCEDURES
MPC Educational Publishers

TYPEWRITING: A MASTERY APPROACH
Science Research Associates, Inc.

TYPING FROM ROUGH DRAFTS
text-workbook, and work papers packet
Milady Publishing Co.

TYPING 2, ADVANCED COURSE
Gregg/McGraw-Hill Book Co.

THE WP BOOK, A REFERENCE MANUAL
John Wiley and Sons

PERFORMANCE CHART

OBJECTIVE: The student will be able to apply procedures in preparing mailable letters and envelopes. This will be evidenced through demonstration and successful completion of the unit test.

	MASTERY	NON MASTERY
1. Identify types of letter styles.		
2. Define open and mixed punctuation.		
3. Identify standard margins.		
4. List the eight basic parts of a business letter.		
5. Identify special parts of a business letter.		
6. List the U.S. Government Regulations for format style when preparing envelopes.		
7. Give the sequencing order for the destination address on an envelope.		
8. Prepare mailable letters using various letter styles.		
9. Prepare envelopes according to U.S. Postal regulations.		
10. Demonstrate knowledge of criteria for mailable letters.		

I. GENERAL INFORMATION

Letters are an important part of a business because they communicate with the customers, clients, and other business firms. The appearance of the letter may make a good impression or prejudice the reader. The proper use and placement of each part of the letter is important. Special attention should be given to the appropriate situation. When a company rather than an individual is being addressed, use: Ladies and Gentlemen or Ladies/Gentlemen; Dear Sir or Madam or Dear Sir-Madam. Examples and illustrations have been given to help understand the different styles of letters and the proper placement of each part or parts.

Although separate units are provided for proofreading and correcting errors, it is necessary to reemphasize and incorporate these subjects into typing mailable letters.

Students should be provided with the criteria for a mailable letter.

Many teaching aids are available for instruction in mailable letters. Charts and transparencies are excellent for demonstration.

II. PREPARATION FOR UNIT

A. Preview unit. Gather resources and references, if necessary, to supplement the unit.

B. Duplicate letterheads provided with this unit for students to use when completing the activities.

C. Provide students with correction tools and envelopes.

D. Design a bulletin board to introduce the unit. It may include samples of letter styles and envelopes.

III. OBJECTIVE SHEET

A. Discuss unit and specific objectives.

B. Add objectives for any information added to the unit.

IV. UNIT OVERVIEW

A. Letter Styles and Formats

1. Discuss each of the letter styles and formats.

2. Provide additional illustrations, if necessary.

3. Discuss the importance of mailable letters.

4. Have students complete selected activities.

(NOTE: If additional practice is needed, select activities from other sources.)

B. Parts of a Business Letter

1. Discuss the information presented.

2. Emphasize the correct placement of each part.

3. Use TM-1--PARTS OF A BUSINESS LETTER to illustrate the information.

4. Discuss informal and formal salutations and complimentary closings.

5. Have students complete selected activities.

NOTES TO THE INSTRUCTOR

C. Preparing Envelopes

1. Discuss the postal regulations for preparing envelopes.

2. Emphasize the importance of placement on the envelope.

3. Provide students with envelopes to use in the activity.

V. ANSWERS TO ACTIVITIES

A. Typed copies of letters and envelopes are provided.

(NOTE: Any correct letter type is "appropriate style.")

B. Grade for mailability of letters and envelopes.

VI. UNIT TEST

A. Covers information presented in the unit

B. May be used as an additional activity

I. LETTER STYLES

A. Block Style

1. A modern efficient letter style
2. Begin all lines at the left margin.

B. Modified Block Style

1. All lines begin at the left margin except:
   a. Dateline
   b. Complimentary close
   c. Signature line
2. These lines may be typed in one of three positions:
   a. Starting at the center point
   b. Typed to end flush with the right margin
   c. Centered at the horizontal center
3. The paragraphs may be blocked or indented.

C. Simplified (AMS) Style

1. Omit the salutation and complimentary closing lines.
2. Use block style.
3. Use a subject line.
   a. Type a triple-space after the inside address and a triple-space before the body of the letter.
   b. Type in all caps.
4. Place the signature line four lines below the body of the letter typed in all caps.
5. Type reference initials and special notations below the signature line.

D. Form Letters

1. Used for routine or large volumes of correspondence
2. Appropriate paragraphs chosen from a standardized copy
3. Variable information, such as the inside address and salutation, are inserted.

E. Executive Correspondence

1. Includes personal and social business letters
2. May use any letter style
3. Prepared on Monarch size (7 1/2 x 10") or half-size (5 1/2 x 8 1/2") stationery.

F. Official (Government) Correspondence

1. Prepared in offices of the U. S. Government
2. Use 8" x 10 1/2" or 8 1/2" x 11" stationery.
3. Type the inside address
   a. At the left margin
   b. Four to six lines below the closing lines
4. Omit reference initials and other notations on the original copy (included on the file copy).

G. Two-Page Letter

1. Typed on plain bond paper
2. Includes a heading
   a. Typed 1" or 1 1/2" from the top edge of the page.
   b. Include the following information:
      (1) First line of the inside address
      (2) The page number
      (3) The date
   c. Triple-space after the heading and continue the body of the letter.

      (NOTE: At least two lines of the body of the letter must be carried over to the second page.)

II. PUNCTUATION

A. Mixed Punctuation

1. Most commonly used style

2. Colon placed after the salutation and a comma after the complimentary close

B. Open Punctuation

1. Most efficient style because it requires less time to type

2. Punctuation omitted after the salutation and complimentary close

III. LETTER PLACEMENT

(NOTE: To save time and effort many offices use standard spacing and margins for all letters.)

A. Standard Spacing

1. Dateline--typed a double-spaced below the letter-head

2. Inside address--leave 4 to 12 lines between the date and inside address, depending on the length of the letter

3. Salutation--typed a double-space below the inside address

4. Body of the letter--begin a double-space below the salutation; single-space the body of the letter and double-space between paragraphs

5. Complimentary close--typed a double-space below the last line of the body of the letter

6. Signature line--typed four lines below the complimentary close

7. Reference initials--typed a double-space below the signature line at the left margin

8. Enclosure notations--typed a double-space below the reference initials at the left margin

B. Standard Margins

1. Side margins

a. Use a 70-space line for long letters.

b. Use a 60-space line for short or medium length letters.

2. Bottom margin--leave at least a one-inch bottom margin on all pages.

*MAILABILITY CRITERIA

Criteria for the Evaluation of Typewritten or Processed/Generated Documents in Secondary Secretarial Programs

Method of Evaluation: Three levels of mailability:

A. M + - Mailable, perfect
B. M - Mailable
C. NM - Not mailable

A. "Mailable +" Standards

1. Document contains no visible errors.
2. All instructions are correctly followed.
3. All errors are corrected--misspellings, typographical errors, incorrect punctuation, incorrect capitalization, incorrect syllabication.
4. Document contains no omission in the body, opening, or closing lines.
5. Document is neatly completed, and document parts are well placed on the page.

B. "Mailable" Standards

1. All instructions are correctly followed.
2. Document contains no uncorrected errors--misspellings, typographical errors, incorrect puncutation, incorrect capitalization, incorrect syllabication, or incorrect word division.
3. Document contains neatly made corrections.
4. Document contains less than ideal placement or spacing on page. Document contains omission of enclosure notation or reference
5. initials.
6. Document contains acceptable (but not most desirable) use of capitalization or punctuation.
7. Document contains an omission or addition of word/words which do not change the meaning of a sentence.

C. "Not Mailable" Standards

1. Instructions were not followed.
2. Document contains uncorrected typographical errors.
3. Document contains uncorrected strikeovers.
4. Document contains obvious corrected strikeovers.
5. Document contains neatly made but excessive/visible strikeovers.
6. Document contains misspelled words.
7. Document contains punctuation or capitalization violations.
8. Document contains grammar violations.
9. Document contains undesirable division of words.
10. Document contains omission or addition of word/words which change the meaning of a sentence.
11. Document displays incorrect page placement or spacing.
12. Document contains omission of some part of the document: date, inside address, etc.
13. Document contains distracting corrections such as obvious use of liquid paper or correction tape, smudges, hole in paper, poor alignment, or incomplete erasures.

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LETTER STYLES

January 20, 19--

Ms. Voil Case
2345 Sam Street
Any City, TX 22222

Dear Ms. Case

This letter will confirm the agreement at which we arrived by telephone this afternoon regarding the insurance on four rent houses, located at 5467 S. Bonham Street, Past, Texas.

Please cancel the policies now in force on these houses and write new policies in accordance with the terms specified under Plan D.

Sincerely

Carey White
Real Estate Manager

lt

BLOCKED

January 20, 19--

Ms. Voil Case
2345 Sam Street
Any City, TX 22222

Dear Ms. Case

This letter will confirm the agreement at which we arrived by telephone this afternoon regarding the insurance on four rent houses, located at 5467 S. Bonham Street, Past, Texas.

Please cancel the policies now in force on these houses and write new policies in accordance with the terms specified under Plan D.

Sincerely

Carey White
Real Estate Manager

lt

MODIFIED BLOCK; OPEN

January 20, 19--

Ms. Voil Case
2345 Sam Street
Any City, TX 22222

Dear Ms. Case:

This letter will confirm the agreement at which we arrived by telephone this afternoon regarding the insurance on four rent houses, located at 5467 S. Bonham Street, Past, Texas.

Please cancel the policies now in force on these houses and write new policies in accordance with the terms specified under Plan D.

Sincerely,

Carey White
Real Estate Manager

lt

MODIFIED BLOCK; MIXED; INDENTED

January 20, 19--

Ms. Voil Case
2345 Sam Street
Any City, TX 22222

NEW INSURANCE POLICIES

This letter will confirm the agreement at which we arrived by telephone this afternoon regarding the insurance on four rent houses, located at 5467 S. Bonham Street, Past, Texas.

Please cancel the policies now in force on these houses and write new policies in accordance with the terms specified under Plan D.

CAREY WHITE, REAL ESTATE MANAGER

lt

AMS SIMPLIFIED

PARTS OF A LETTER

Printed Letterhead →

The Kangaroo Pouch
405 Lollipop Lane
Goose Trail, TX 12345
Director: Twinker Bell

Date → January 20, 19--

Inside Address →
Kiddie Land Equipment Company
8001 Oakhill Avenue
Camero, TX 78206

Attention Line → Attention: Candy Kane

Salutation → Dear Sir or Madam:

Subject Line → SUBJECT: Equipment

Body →
I should like to have more information about your Kiddie Land Equipment, which I saw advertised in the MORNING SUN. I am particularly interested in the electronic train, Star Trek cars, Star Wars slide, and the walking robot.

One section of our park, measuring 40 x 50 feet, could be converted to a special area for small children. I am enclosing a diagram of this plot.

Any suggestions you have for arranging your equipment on such a plot of ground will be appreciated.

Complimentary Close → Sincerely,

Company Name → THE KANGAROO POUCH

Signature → *Twinker Bell*

Typed Name → Twinker Bell

Title → Director

Reference Initials → lt

Enclosure → Enclosure

Carbon Copy Notation → cc: Todd Tobar

ELECTRONIC OFFICE

75.89(b)(1)(D) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT
KEYBOARDING SKILLS

Understand methods of transmitting information electronically

UNIT OBJECTIVE

The student will be able to understand methods of transmitting information electronically.

SPECIFIC OBJECTIVES

1. Identify new automated office technologies of this decade.
2. Define telecommunications.
3. Identify the types of communication systems.
4. Define electronic mail.
5. Identify the types of electronic mail.
6. Describe the advantages of telecommunications and electronic mail.

TEACHER ACTIVITIES

1. Preview Unit Overview information for discussion.
2. Design a bulletin board using pictures of automated offices.
3. Gather current office magazines for use in class assignments.
4. Ask a telecommunications system vendor to demonstrate equipment to the class.
5. Plan a field trip to an automated office.

STUDENT ACTIVITIES

1. Read and discuss Unit Overview information.
2. Prepare a report from a current magazine or newspaper on automated office procedures.
3. Present the report orally to the class.

EVALUATION- Unit Test

ESTIMATED COMPLETION TIME 3--6 hours

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section

RESOURCES

A. References

DEVELOPING EFFECTIVE FILE MANAGEMENT FOR WORD PROCESSING
The Office
October, 1984

ELECTRONIC MAIL
MPC

IN PURSUIT OF OFFICE EFFICIENCY
Business Software
November, 1984

INTRODUCTION TO BUSINESS TELE-COMMUNICATIONS
textbook
Charles E. Merrill Publishing Co.

METHODS ARE CHANGING; SO, TOO, ARE EMPLOYEES
The Office
January, 1984

OFFICE AUTOMATION
AMACOM

OFFICE PROCEDURES
Gregg/McGraw-Hill

OFFICE PROCEDURES
MPC Publishers

PRIVATE DELIVERY FIRMS EXPAND THEIR SERVICES
The Office
August, 1981

PROBLEM SOLVERS: PACKAGE DELIVERY SERVICES
Modern Office Procedures
November, 1980

SECRETARIAL OFFICE PROCEDURES
South-Western Publishing Co.

TELECOMMUNICATIONS: CONCEPTS, DEVELOPMENT, AND MANAGEMENT
text
Bobbs-Merrill Educational Publishers

THE ELECTRONIC OFFICE
Prentice-Hall

THE ELECTRONIC OFFICE
four filmstrips with teacher's guide and supplementary activities
Glencoe Publishing Co.

THE ELECTRONIC OFFICE, A GUIDE FOR MANAGERS
Dow Jones-Irwin

THE EVOLVING ROLE OF THE SECRETARY IN THE INFORMATION AGE
C. A. Pesko Associates, Inc.

THE EYES HAVE HAD IT
Business Software
November, 1984

THE FACSIMILE FACTOR AND ITS IMPORTANCE IN TODAY'S COMMUNICATIONS PICTURE
The Office
May, 1981

THE SECRETARY'S WORKSHOP
Bureau of Business Practice

WORD PROCESSING IN THE MODERN OFFICE
Benjamin/Cummings Publishing Co.

WORD PROCESSING: OPERATIONS, APPLICATIONS, AND ADMINISTRATION
Bobbs-Merrill Company, Inc.

I. THE ELECTRONIC OFFICE

A. Surveys indicate that 60% of an employee's time is spent in communications: writing, typewriting, telephone communications, and mail. The electronic transmission of information is beginning to have a tremendous impact on the modern office.

B. The following new technologies have been joined together to form the electronic office of the eighties:

1. Word/information processing
2. Data processing
3. Information storage/retrieval systems
4. Telecommunications
5. Voice recognition
6. Electronic mail
7. Teleconferencing
8. Facsimile
9. Reprographics
10. Micrographics
11. Records management

C. Advantages of automation

1. Instant information-sharing through networks
2. Information easier to access
3. Information easier to distribute
4. Information easier to manage
5. Electronic filing of documents
6. Electronic calendaring
7. Better quality of laser printers

II. TELECOMMUNICATIONS

A. Telecommunications is a broad field that includes:

1. Data communications systems--networks of devices organized to transmit data from one location to another in coded form over electrical transmission facilities. It speeds up information flow by reducing the time spent in collecting and distributing data.

2. Message and image systems--send messages in data form and transmit messages rather than conversations. TWX, Telex are message systems and facsimile is an image system that sends pictures, sketches, diagrams and graphs--all in data form.

3. Data systems, message systems and image systems all transmit information in coded form by means of electrical pulses that represent digital signals.

B. Telecommunications permits the transmission and reception of text over telephone lines, microwave circuits, and satellite links.

C. Telecommunications is the medium by which a word processor or computer in one location can send text to or receive text from a word processor or computer several yards or many miles away.

D. It provides the essential link between compatible terminals and furnishes the network through which information can flow quickly and efficiently.

E. It is the key to reducing mismanaged information and time lost due to inefficient communication procedures.

III. TYPES OF TELECOMMUNICATION SYSTEMS

A. Networks

1. The total information network links together two or more electronic work stations.

2. Networks are established to collect data from remote points (terminals) and transmit that data to a central point equipped with a computer or another terminal.

3. The network theory is that all types of input devices--computers, electronic copiers, word processors, facsimile machines, optical character recognition (OCR) devices--can be connected to one universal system for the exchange and interaction of information through communications.

B. Modems

1. Modems (MOdulator/DEModulator) form the interface between the terminals and the transmission facility.

2. Data is transferred through a modem that translates the characters into signals that can be understood by computers.

3. The signals travel over the communications channel to another modem in another location that translates the signals back into data.

4. The data is then transferred into the word processor or computer for editing or printout.

C. Satellites

1. Satellites are alternatives to wire transmission.

2. Firms in one location are wired by a coaxial cable to an antenna known as an earth station on the roofs of their buildings.

3. The satellite beams the data to another earth station at a distant location, which then transmits it to the receiving terminal.

4. Beamed communications are transmitted faster, more reliably, and more economically.

5. Text, data, voice, and video information can be sent in a matter of seconds.

D. Voice messaging

1. Telecommunications also includes the transmission of voice.

2. Voice mail is a new technology where the terminal is a telephone and the message is spoken rather than read on a screen.

3. Voice mail is used to automate the delivery of messages over a telephone network.

4. It is generally used for brief, one-way communications.

5. This system increases the productivity of office employees because the caller can call several individuals at the same time and save time spent on the telephone.

E. Teleconferencing

1. A teleconference is a meeting conducted over telephone lines, involving groups of people who are located in distant places.

2. It is a low cost and effective communications tool that overcomes problems created by distance and time.

3. Teleconferencing eliminates expensive travel and hotel cost and gives executives more time to spend at their desks.

IV. ELECTRONIC MAIL

A. Electronic mail is a means of communicating textual information electronically. It is used to communicate information to the proper destination in the shortest possible time.

B. It is the most popular means of transmitting information electronically.

V. CHARACTERISTICS OF ELECTRONIC MAIL

A. Communication is sent over telephone or telegraph lines or is relayed by a satellite system.

B. Incoming mail may be on video tape and delivered by television. Executives are able to read their mail on a computer or television screen.

C. Outgoing mail may be put on microfiche and automatically indexed by a computer.

VI. ADVANTAGES OF ELECTRONIC MAIL SYSTEMS

A. Faster delivery of facts and information

B. Reduced paperwork volume, photocopying, and mailing expense

C. Greater independence for geographically isolated areas

D. Elimination of time zone restrictions

E. Improved access to personnel

F. Reduction of unnecessary-interruptions

VII. TYPES OF ELECTRONIC MAIL

A. Mailgram (Telex or TWX)

1. Used to send routine, brief communications that do not contain charts or other graphics and that do not require a signature.

2. Can be fairly expensive

B. Communicating word processor

1. Used to transmit information between locations

2. Must have compatible sending and receiving word processors and be able to speak the same computer language or be equipped with language converters

3. Information is keyboarded into the terminal.

4. The message is transmitted by telephone or private wire lines to the receiving terminal which prints a copy of the message.

C. Facsimile

1. Facsimile is used to communicate urgent information that is too long or too detailed to explain over the phone.

2. It is used to send charts, graphs, pictures, etc.

3. It is used when a written record is needed for the files.

4. The original is placed in the sending machine.

5. A scanning device converts the visual image into electronic signals for transmission.

6. The electronic signals are sent over telephone or private wire lines to the receiving unit which decodes the signals and prints out a copy (facsimile) of the original.

VIII. ELECTRONIC MAIL SERVICES

A. Many electronic communications companies offer services of electronic mail. These range from the U. S. Postal Service to telephone companies to computer software companies.

B. Electronic mail software is available that allows passage of messages between personal computer networks in different offices or cities.

C. Software is available to allow passage of information from mainframe to microcomputers.

IX. CHOOSING AN ELECTRONIC MAIL SERVICE

A. The system should work with your existing computer equipment.

B. The system should include support and equipment maintenance.

C. The system should perform all the functions you need.

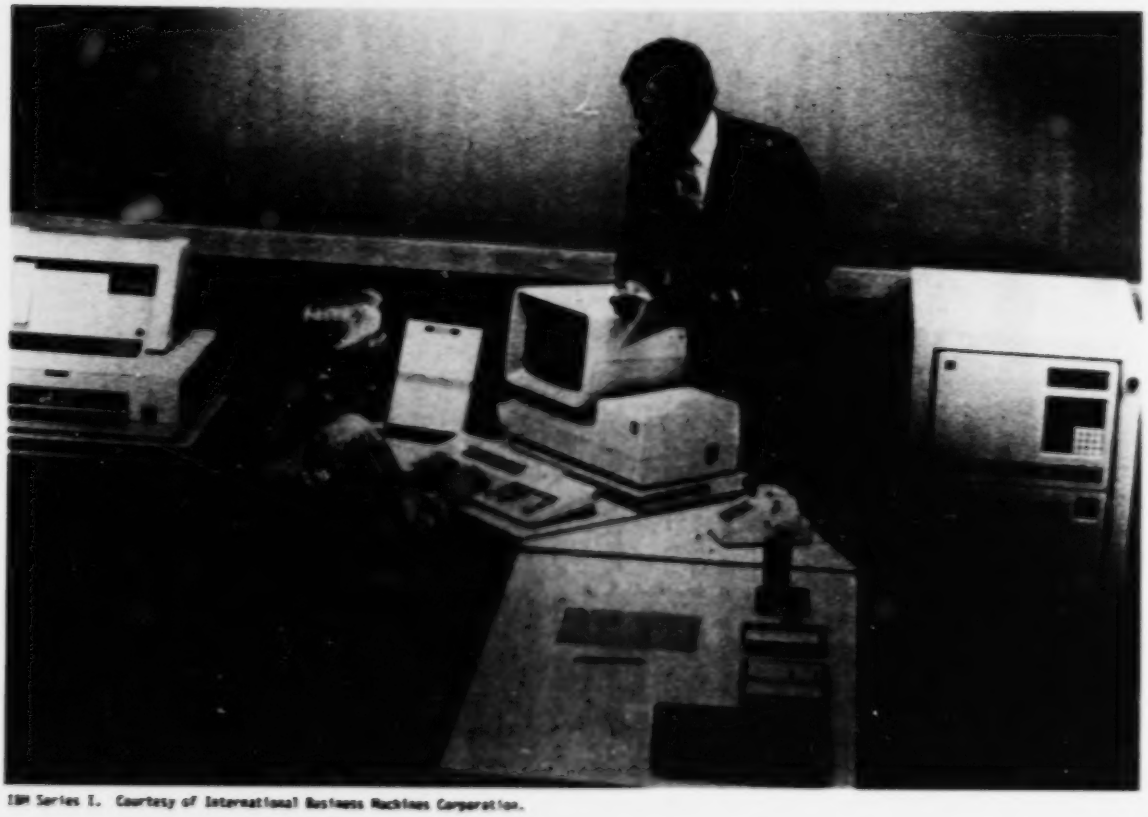
D. The system should allow for expansion.

E. The system should be customized for the user.

METHOD	LETTER	TELEX	TELEPHONE	WORD PROCESSOR	COMPUTER MAIL	FACSIMILE	VOICE MAIL
Form of input	Typewriter or WP	Teletype	Telephone	Word Processor	Terminal	Fax Machine	Telephone
Communications	U. S. Postal Service	Telex Network	Electronic	Electronic	Electronic	Electronic	Electronic
Formality	Very Formal	Formal	Informal	Formal	Informal	Both	Informal
Intercompany	Yes	Yes	Yes	No	Sometimes	Sometimes	No
Delivery	1 to 5 days	Immediate	Telephone tag	Immediate	In mailbox immediately	Immediate	In mailbox immediately
Typical Transmission Cost	Stamp	$1.00	$1.50	$.60	$.50	$1.00	$1.00
Advantages	Original	Legally binding	Warm, interactive	Letter quality	Flexible, computer based	Pictures, graphs	Hear voice, computer based
Operator	Secretary	Operator	Principal	Secretary	Principal	Secretary	Principal
Best Use	Formal letters, contracts	Urgent business communications which are binding	Negotiations, exchange of complex information, teleconferencing	Lengthy documents	Messages that are complex or have numbers	Pictures, graphs, signatures	Short simple messages
Examples	Proposals, letters of introduction	Order product, delivery instructions, cancel	Telephone interviews, negotiate volume discount	Internal memorandum, promulgate new corporate policy	Check project status, exchange preliminary financial information	Drawings, schematics, sketches	Schedule meetings, arrange travel plans, request information

Typical transmission costs can vary greatly, depending on application, vendor and implementation, author's chart shows.

Minolta PCW-1 Office System. Courtesy of Minolta Corporation's Business Equipment Division.



IBM Series I. Courtesy of International Business Machines Corporation.

Ricoh Rapicom 120 Mini Fax Facsimile. Courtesy of Ricoh Corporation.

Kodak KAB-4400 information system. Courtesy of Eastman Kodak Company.

FILING

75.89(b)(2)(A) SECRETARIAL AND GENERAL OFFICE ESSENTIAL ELEMENT--RECORDS CONTROL

Identify correct usage in applying terminology and procedures for indexing, coding, and filing using the alphabetic, numeric, subject, and geographic systems.

UNIT OBJECTIVE

The student will be able to identify and demonstrate correct usage in applying terminology and procedures for indexing, coding, and filing alphabetically, numerically, and geographically.

SPECIFIC OBJECTIVES

1. Identify terms and procedures used in filing.
2. Identify indexing rules.
3. Identify 10 basic rules for filing personal names alphabetically.
4. Demonstrate the ability to:
   a. Index and code, and file alphabetically personal, business and organization names
   b. Prepare cross reference sheets
   c. Determine subdivisions and file by subject
   d. File documents numerically

TEACHER ACTIVITIES

1. Preview the unit objectives.
2. Decide on instructional materials and methods to be used.
3. Gather filing supplies and equipment to be used for demonstration.
4. Discuss unit objectives with the students.
6. Assign activities to reinforce knowledge of filing rules.
5. Prepare or secure transparencies to explain filing rules.

STUDENT ACTIVITIES

1. Discuss terms and procedures used in filing.
2. Discuss rules for alphabetical, geographical, and numerical filing.
3. Complete practice activities in the following:
   a. indexing and coding alphabetically
   b. cross referencing
   c. determining subdivisions by subject
   d. filing numerically
   e. filing geographically
4. Complete a simulated office practice set in filing.

EVALUATION -Unit Test

ESTIMATED COMPLETION TIME

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the Resources Section

RESOURCES

ALPHABETIC INDEXING
South-western Publishing Co.

ALPHABETIC INDEXING
15-20 class hours, text, workbook
South-Western Publishing Co.

ALPHABETIC INDEXING FOR NAMES OF INDIVIDUALS AND BUSINESSES
an audiovisual
Occupational Curriculum Laboratory
East Texas State University
Commerce, TX 75428

ALPHABETIC INDEXING RULES
1 disk, workbook, and teacher's manual
Apple II, IIe, or IIc
TRS-80 Model III or IV
IBM-PC
Career Aids, Inc.

ALPHABETIC INDEXING RULES APPLICATION BY COMPUTER
text, workbook, diskette for:
TRS-80 Model III and IV
TRS-80 network III
Apple II Plus and Apple IIc
IBM-PC
Tandy 1000
South-Western Publishing Co.

BUSINESS FILING AND RECORDS CONTROL
South-Western Publishing Co.

BUSINESS RECORDS CONTROL
South-Western Publishing Co.

EDL FILING COURSE FILMSTRIPS
Gregg/McGraw-Hill Book Co.

FILE CLERK
Micro-computer Job Simulator Series
TRS-80 Model III
Career Aids, Inc.

FILING MADE EASY
Houghton Mifflin Publishing Co.

FILING MADE EASY, A FILING SIMULATION
Houghton Mifflin Publishing Co.

FILING PRACTICE WORKBOOK
Glenn Publishing Co.

FILING PROCEDURES
MPC Educational Publishers
(Milady Publishing Co.)

FILING PROCEDURES
audiovisual slides
MPC Educational Publishers
(Milady Publishing Co.)

FILING SKILLS
film, program guide, masters
Prentice Hall Publishing Co.

GREGG QUICK FILING TRANSPARENCIES
Gregg/McGraw-Hill Book Co.

GREGG QUICK FILING PRACTICE SET
Gregg/McGraw-Hill Book Co.

OFFICE FILING PROCEDURES
South-western Publishing Co.

PROGRESSIVE FILING
Gregg/McGraw-Hill Book Co.

SECRETARIAL OFFICE PROCEDURES
South-western Publishing Co.

WORKBOOK EXERCISES IN ALPHABETIC FILING
Gregg/McGraw-Hill Book Co.

75.89(b)(1)(D)

OBJECTIVE: The student will be able to understand methods of transmitting information electronically.

	MASTERY	NON MASTERY
1. Identify new automated office technologies of this decade.		
2. Define telecommunications.		
3. Identify the types of communication systems.		
4. Define electronic mail.		
5. Identify the types of electronic mail.		
6. Describe the advantages of telecommunications and electronic mail.		
Unit Test		

PERFORMANCE CHART

I. PREPARATION FOR UNIT

A. Possibilities of ways to present this unit are unlimited.

B. Current office magazines have a wealth of information regarding telecommunications and electronic mail, as well as other areas within the electronic office.

C. This is an ideal time to utilize community resources.

II. UNIT OVERVIEW INFORMATION

A. The Unit Overview serves as an outline of information to be covered with brief explanations.

B. Textbooks and magazine articles can easily supplement the information given.

III. ACTIVITIES

A. Students could be assigned a report from magazines or newspapers on the automated office.

B. This report could be given orally to the class.

iV. UNIT TEST

A. The unit test could include information studied in the unit overview.

B. The unit test could be divided into two separate parts.

CODING PERSONAL NAMES

1. Rose/Allen (2)

2. Sandor/V./Ambrus (2 3)

3. Emma/Kinney/Blackmon (2 3)

4. Chas./F./Butler (MD) (2 3)

5. Joni/E./Chaniss-Brown (2 3)

6. H./L./ Doremus (2 3)

7. Catherine/Delores (2)

8. Michael/L./FitzSimmons (Jr.) (2 3)

9. Donald/Henry (2)

10. Amanda/K./Krzywonsky (2 3)

INDEXING PERSONAL NAMES

Name	1st Unit	2nd Unit	3rd Unit	4th Unit
Richard Alvarado	Alvarado	Richard		
Diane E. Alvarez	Alvarez	Diane	E.	
Chas. Ament	Ament	Charles		
J. M. Borosky	Borosky	J.	M.	
Angelita G. De Vos Loren	De Vos Loren	Angelita	G.	
Alejandro Diaz-Infante	Diaz-Infante	Alejandro		
Father O'Maley	Father	O'Maley		
Edw. T. Marquis	Marquis	Edward	T.	
Lucille McCaskill	McCaskill	Lucille		
John B. Morgan, Dallas	Morgan	John	B.	Dallas
John B. Morgan, Houston	Morgan	John	B.	Houston
Mrs. Sam Olguin (Emily)	Olguin	Emily (Mrs. Sam)		
Stuart K. Strong, Jr.	Strong	Stuart	K. (Junior)	
Stuart K. Strong, III.	Strong	Stuart	K. (Third)	

CODING BUSINESS NAMES

```
             2
Air Port/Restaurant

           2      3    4
Butler-/Elliott/Brick/Co.

           2      3
El Galo/Chemical/Co.

          2         3
Koger/Properties,/Inc.

2  3          4
J./F./Kreuz,Inc.

        2     3       4
L (&)/M/Investment/Co.

      2    3      4       5
New/York/Life/Insurance/Co.

                2     3
Oliver('s)/Repair/Shop

          2      3
On(the)/Spot/Cleaners

       2        3
l/Highland/Center

2  3
A./R./Pruett/Abilene

2  3
A./R./Pruett/Austin
```

	1st	2nd	3rd	4th	5th
Air Port Restaurant	Air Port	Restaurant			
Butler-Elliott Brick Co.	Butler	Elliott	Brick	Company	
El Galo Chemical Co.	El Galo	Chemical	Company		
Koger Properties, Inc.	Koger	Properties	Incorporated		
L & M Investment Co.	L (&)	M	Investment	Company	
New York Life Insurance Co.	New	York	Life	Insurance	Company
Oliver's Repair Shop	Oliver('s)	Repair	Shop		
On the Spot Cleaners	On (the)	Spot	Cleaners		
1 Highland Center	One	Highland	Center		
A. R. Pruett, Abilene	Pruett	A.	R.	Abilene	
A. R. Pruett, Austin	Pruett	A.	R.	Austin	

CROSS-REFERENCING BUSINESS NAMES

Price-Ramsey Law Firm

Original filed under: Price-/Ramsey/Law/Firm (2 3 4)

Cross-referenced under: Ramsey/Price/Law/Firm (2 3 4)

IBM Corp.
International Business Machines Corp.

Original filed under: International/Business/Machines/Corporation (2 3 4)

Cross-referenced under: I/B/M/Corporation (2 3 4)

John Hancock Insurance Company

Original filed under: Hancock/John/Insurance/Company (2 3 4)

Cross-referenced under: John/Hancock/Insurance/Company (2 3 4)

Radio Shack a subsidiary of The Tandy Corporation

Original filed under: Radio/Shack (2)

Cross-referenced under: Tandy/Corporation (The) (2)

Master Card (formerly Master Charge)

Original filed under: Master/Card (2)

Cross-referenced under: Master/Charge (2)

RECORDS CONTROL

75.89(b)(2)(B) SECRETARIAL AND GENERAL OFFICE ESSENTIAL ELEMENT--RECORDS CONTROL

Understand procedures for controlling manual and automated records.

RECORDS CONTROL

UNIT OBJECTIVE

The student will understand procedures for controlling manual and automated records.

SPECIFIC OBJECTIVES

1. Identify the systems of successful records control and management in the operation of a business.
2. Recognize and use the procedures of maintaining information in terms of time, space, and equipment.
3. Describe the five phases of the records cycle.
4. Identify and describe the two types of transfer methods.
5. Describe the major types of filing equipment and give the advantages and disadvantages of each.
6. Select filing equipment and materials for use in a specific office situation.
7. Describe the use of micrographics in the office situation.
8. Identify the types of microforms.
9. Describe the advantages of automated records control.

TEACHER ACTIVITIES

1. Preview the unit.
2. Gather instructional materials and activities relating to the unit.
3. Activities are given in notes to the instructor.
4. Gather articles from current office and professional magazines on automated records control.
5. Secure the audiovisual presentation, "Records Management," from the Occupational Curriculum Laboratory.
6. Invite a records manager to discuss various aspects of records management with the class.
7. Discuss the unit information with the students.
8. Arrange for students to visit a local office supply firm.

STUDENT ACTIVITIES

1. Discuss Unit Overview information.
2. Complete reinforcement activities provided by instructor.
3. Visit a local office supply firm.
4. Summarize three recent articles on automated records control.

EVALUATION-Unit Test

71

ESTIMATED COMPLETION TIME3 - 5 hours

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section.

RESOURCES

AUTOMATED FILING SYSTEMS
filmstrip and exercises
Prentice-Hall Media

FILING SYSTEMS
films, program guide, masters
Prentice-Hall Publishing Co.

INFORMATION AND RECORDS MANAGEMENT
Glencoe Publishing Co.

MICROCOMPUTER ACTIVITIES FOR OFFICE PROCEDURES
1 disk, text-workbook, teacher's manual for
Apple II, IIe, or IIc; TRS-80 Model III or 4; IBM PC
Southwestern Publishing Co.

MICROCOMPUTER ACTIVITIES FOR RECORD KEEPING
Houghton Mifflin

RECORDS MANAGEMENT
Milady Publishing Co.

RECORDS MANAGEMENT
Prentice-Hall Publishing Co.

RECORDS MANAGEMENT APPLICATIONS
John Wiley & Son, Inc.

SUMMIT ENTERPRISES: A RECORD KEEPING SIMULATION
Houghton-Mifflin Publishing Co.

OBJECTIVE: The student will be able to identify and demonstrate correct usage in applying terminology and procedures for indexing, coding, and filing alphabetically, numerically, and geographically.

	MASTERY	NON MASTERY
1. Identify terms and procedures used in filing.		
2. Identify indexing rules.		
3. Identify 10 basic rules for filing personal names alphabetically.		
4. Complete activity on indexing and coding alphabetically.		
5. Complete activity on cross referencing.		
6. Complete activity on determining subdivisions by subject.		
7. Complete activity on filing numerically.		
d. Complete activity on filing geographically.		
9. Complete a simulated office practice set in filing.		

PERFORMANCE CHART

I. GENERAL INFORMATION

A. Filing has to do with one of the most important assets in an organization--its records and information. The purpose of filing is to preserve valuable records for safekeeping.

B. As the federal and local governments make heavier paperwork demands on individuals and businesses, the need for efficient filing systems, equipment, and personnel becomes increasingly important.

II. PREPARATION FOR UNIT

A. Decide on resources to be used in this unit.

B. Secure or make transparencies giving examples of filing rules.

C. Gather resources and materials such as folders, labels, and pictures of various kinds of file cabinets.

III. UNIT INFORMATION AND ACTIVITIES

A. Information Sheets are not given with this unit. Many resources are available.

B. OCL Filing Units of Instruction are available.

C. Practice sets and textbooks are available that offer practice supplies to reinforce each rule as it is presented.

D. Software is available to teach filing rules and applications on the microcomputer.

E. Transparencies are very helpful in teaching and discussing filing rules.

IV. UNIT TEST

A. Tests are available with most all resource packages.

B. Practical application tests are suggested for this unit.

NOTES TO THE INSTRUCTOR

75.89(b)(2)(B)

OBJECTIVE: The student will understand procedures for controlling manual and automated records.

	MASTERY	NON MASTERY
1. Identify the systems of successful records control and management in the operation of a business.		
2. Recognize and use the procedures of maintaining information in terms of time, space, and equipment.		
3. Describe the five phases of the records cycle.		
4. Identify and describe the two types of transfer methods.		
5. Describe the major types of filing equipment and give the advantages and disadvantages of each.		
6. Select filing equipment and materials for use in a specific office situation.		
7. Describe the use of micrographics in the office situation.		
8. Identify the types of microforms.		
9. Describe the advantages of automated records control.		
Unit Test		

PERFORMANCE CHART

I. GENERAL INFORMATION

A. Records management should be thought of as a comprehensive, organized, and coordinated set of activities in which an organization controls its information, from the creation of this information through final disposition of it.

B. New technological developments for processing information give records managers a chance to form new ideas and to use new devices for handling, storing, and destroying paper records.

C. Current trends in business toward automated records control deem it necessary for students to be trained in this area if possible. Software is available for microcomputers that will teach and give reinforcement activities in automated records control.

II. PREPARATION FOR THE UNIT

A. Preview the Unit Overview and reproduce copies for students.

B. Secure audiovisual, "Records Management," from the Occupational Curriculum Laboratory. Duplicate resource sheets and activity sheets for students.

C. Secure "Records Management" slides and activities from MPC and duplicate activities for students.

D. Software is available for use on microcomputers and word processors that will reinforce knowledge and demonstrate automated records control.

E. Invite a records manager to discuss various aspects of records management. Ask them to bring examples of forms used to facilitate records control and to give any unique applications of the records control cycle in their company.

F. Gather office magazines with articles on automated records control.

III. UNIT INFORMATION AND ACTIVITIES

A. Discuss the Unit Overview information with the students.

B. Discuss the definitions and terms associated with records control.

C. Discuss with the students the current trend in business toward cost effectiveness in all facets of operations, including records control.

D. As an activity, visit the local office supply store to learn about various types of filing supplies and equipment.

E. If microcomputers on word processors are not available, ask a vendor to bring and demonstrate records control on a machine.

F. Assign activities from listed resources to reinforce information in this unit.

I. TERMS AND DEFINITIONS

A. Information--consists of all data and words that an organization needs to function effectively; can include paper and electronically-based records and all types of numeric or graphic records (may also be called record or document.)

B. Information Management--the process of controlling organizational information from the creation of the information through its final disposition (may also be records management.)

C. Filing--the physical process of preparing records to be filed and placing them into their respective storage containers; filing is one of the activities that occurs as part of records management

D. Record--includes any format upon which information is placed, stored, used, or distributed; the most commonly used records are forms, correspondence, reports, and printouts

E. Records Cycle--the steps that a record passes through from its creation to its final use; these steps include: (1) creation of record, (2) survey and use, (3) storage and retention, (4) transfer, and (5) disposal

F. Records Control--the management steps in which records are systematically processed so that they are used effectively and contribute toward achieving some goal

II. RECORDS MANAGEMENT & CONTROL ACTIVITIES

A. Forms control

B. Reports, management, and control

C. Correspondence control

D. Active files management

E. Inactive files management

F. Micrographics

G. Records management manuals

H. Vital records control

I. Directives management

J. Mail management

K. Records inventory and appraisal

L. Records retention and disposition

M. Archive management and control

N. Copy reproduction control (reprographics)

III. GOALS OF INFORMATION MANAGEMENT

A. To furnish accurate and complete information when, where, and to whom required in order to manage and operate the organization effectively

B. To control the creation of information so that only needed and meaningful information is originated

C. To process and handle information as efficiently and effectively as possible

D. To provide records control at the lowest possible cost without incurring unnecessary expenses

E. To render maximum service to the user of the records so that this person can quickly and easily obtain whatever information is required

F. To have all necessary information available and in a useful format so that sound and timely decisions can be made

G. To fulfill the requirements of external agencies and organizations by providing them with whatever information is needed or requested

H. To process and retain only those records that have a specified value to the organization or have a legal requirement to be retained

IV. ADVANTAGES OF RECORDS CONTROL PROGRAM

A. Organization size may vary:

1. Small offices might have active files maintenance and mail and correspondence control.

2. Large offices might have forms controls, directives management, and automated storage methods.

B. Cost may be reduced.

C. Standardization of policies and procedures will occur.

D. Work activities become more efficient.

E. Responsibility for records operations may be clearly defined.

F. Paper and nonpaper records become standardized.

V. THE RECORDS CYCLE

A. Creation

1. Justify the need for the record.

2. Measure its possible costs.

3. Assign responsibility for creation control.

B. Utilization

1. Prepare documents for filing.

2. Obtain appropriate filing equipment and supplies.

3. Determine retrieval procedures.

4. Complete records inventory.

C. Retention

1. Classify records according to their value.

2. Establish retention schedule.

3. Code documents with retention period.

D. Transfer

1. Determine transfer date.

2. Assign responsibility for transfer.

3. Effect transfer in one of several methods.

E. Disposal

1. Review retention schedule.

2. Select disposal method most appropriate.

3. Carry out disposal in timely manner.

VI. MICROGRAPHICS

A. Micrographics describe the overall process of filming documents and reducing them into a different format.

B. It combines the science and the technology by which information can be reduced quickly to the medium of microfilm, stored conveniently, and be easily retrieved for reference and use.

C. MICROFORM is the term for any record, either film or paper, which contains reduced images or microimages.

VII. TYPES OF MICROFORMS

A. Microfilm

1. The oldest type of microform

2. Can be stored on a microfilm roll

3. Can be produced with minimum of document preparation

4. Duplicates easily obtainable

5. Can be viewed on a variety of readers

6. Can be coded to ensure quick retrieval

B. Microfiche

1. Uses a unit-record approach where only desired document is placed on one card

2. Economical and can be produced on a variety of equipment

3. Easy to handle and can be mailed cheaply

4. Images can quickly be located on a microfiche reader

5. Can be viewed on a variety of portable or nonportable readers

6. Can be used to film all kinds of documents, including pictures or other visuals in both black and white or color

C. Ultrafiche

1. Uses an ultrahigh reduction ratio

2. Offers the greatest storage density of any microform

3. Is more expensive to prepare

4. Requires more sophisticated readers capable of enlarging very small images

D. Microcard

1. A special type of microrecord that contains images on both sides of the card

2. Also called an opaque card

3. Easily coded and quickly filed and retrieved

4. Durable paper stock coated with a plastic lamination

5. Images can be placed on both sides of the card

6. Can be viewed by inexpensive opaque readers

E. Aperture Cards

1. Combination of microfilm with a punched card

2. Allows data to be stored with the microimage

3. Information stored relating to one subject or topic

4. Readable heading identifies each card.

5. Documents can be easily updated or revised.

6. Cards are easy and economical to mail.

F. Jackets

1. Plastic unitized record similar in size to microfiche

2. Can be easily updated

3. Protect the microfilm

4. Allows records personnel to organize images in any desired sequence

5. Can be easily coded for retrieval and storage

VIII. ADVANTAGES OF MICROFORMS

A. Microforms save space.

B. They provide excellent preservation of records.

C. Microforms drastically reduce distribution costs.

D. Time required to retrieve documents is reduced.

E. The efficiency of records personnel is increased.

F. Microforms can be coupled with computers to offer even greater retrieval possibilities.

IX. AUTOMATED RECORDS CONTROL

A. Automating the transmission and storage of information involves new technological developments for processing information.

B. The automated office now incorporates many of the following technological developments into records control.

1. Electronic mail

2. Electronic document distribution

3. Electronic message centers

4. Electronic document identification

5. Telecommunication networks

C. Communications networks coincide with the automated flow and transmission of information among electronic devices in automated records control.

D. The merging of data/word processing technology with the new telecommunication technology provides more variety of information storage and information processing combinations.

E. Extended telecommunication networks make it possible to interface voice, facsimile and data/word input to access or transmit from large data banks of all types.

F. Data banks maintain a wide variety of information.

1. They are large files held electronically, usually on tape, discs, cylinders or microfilm.

2. It is organized and programmed in such a manner that retrieval is efficient.

3. Some data banks are commercially prepared and may be rented.

G. Micro-retrieval systems combined with word processing devices allow typewritten documents to be filed and indexed automatically on microfilm.

MAIL PROCEDURES

75.89(b)(2)(C) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT--RECORDS
CONTROL

Understand and demonstrate the procedures of handling incoming and outgoing mail.

MAIL PROCEDURES

UNIT OBJECTIVE

The student will be able to process incoming and outgoing mail. This knowledge will be evidenced through demonstration and by successfully completing the unit test.

SPECIFIC OBJECTIVES

1. Define terms related to processing incoming mail.
2. List keys to efficient mail-handling procedures.
3. Identify the three steps in processing incoming mail.
4. Name the three types of outgoing mail.
5. Identify the steps for processing outgoing mail.

TEACHER ACTIVITIES

1. Obtain brochures and books from the U. S. Postal Service.
2. Arrange for a vendor, such as Pitney-Bowes, to demonstrate and explain mail-handling equipment.
3. Discuss the unit and specific objectives.
4. Provide illustrations of electronic mail systems to facilitate discussion.

STUDENT ACTIVITIES

Demonstrate the ability to:

1. Scan and annotate letters
2. Prioritize incoming mail
3. Determine postal service
4. Determine postal rates
5. Determine private carrier services

EVALUATION-Unit Test

ESTIMATED COMPLETION TIME

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RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section.

RESOURCES

BETTER PACKAGES, INC.
8 Brook St.
Shelton, CT 06484

BURROUGHS CORPORATION
Office Systems
9 Ray Avenue
Burlington, MA 01803

"THE FACSIMILE FACTOR AND ITS IMPORTANCE IN TODAY'S COMMUNICATIONS PICTURE"
THE OFFICE
1200 Summer St.
Stamford, CT 06904

FRIDEN MAILING EQUIPMENT
31285 San Clemente Street
Hayward, CA 94544

IBM
Office Products Division
400 Parsons Road
Department 804
Franklin Lakes, NJ 07417

3M COMPANY
3M Center, Bldg. 220-9E
St. Paul, MN 55144

MAIL HANDLING
Student instructions, instructors' notes, mailing supplies
Prentice Hall Media

MOS SCALE INTERNATIONAL
3178 Pullman Street
Costa Mesa, CA 92626

NATIONAL CONTROLS, INC.
P. O. Box 1501
Santa Rosa, CA 95402

OMNIFAX
Telautograph Corporation
8700 Bellance Avenue
Los Angeles, CA 90045

OFFICE PROCEDURES
Milady Publishing Co.

OFFICE PROCEDURES
Gregg/McGraw-Hill

PITNEY BOWES
2971 Pacific Street
Stamford, CT 06926

POSTALIA POSTAGE METER SYSTEMS
1423 Centre Circle Drive
Downers Grove, IL 60515

"PRIVATE DELIVERY FIRMS EXPAND THEIR SERVICES"
THE OFFICE

"PROBLEM SOLVERS: PACKAGE DELIVERY SERVICES"
MODERN OFFICE PROCEDURES,
November 1980
P. O. Box 95759
Cleveland, OH 44101

PROCESSING INCOMING & OUTGOING MAIL
Audiovisual slides, teacher's manual, student projects, and evaluation instrument

SECRETARIAL OFFICE PROCEDURES
Southwestern Publishing Co.

THE SECRETARY'S WORKSHOP
Bureau of Business Practice
24 Rope Ferry Road
Waterford, CT 06386

TRANS-LUX CORPORATION
110 Richards Avenue
Norwalk, CT 06854

WORD PROCESSING IN THE MODERN OFFICE
Benjamin/Cummings Publishing Co.

WORD PROCESSING: OPERATIONS, APPLICATIONS, AND ADMINISTRATION
Bobbs-Merrill Company, Inc.

XEROX CORPORATION
Xerox Square
Rochester, NY 14644

OBJECTIVE: The student will be able to process incoming and outgoing mail.

	MASTERY	NON MASTERY
1. Define terms related to processing incoming and outgoing mail.		
2. List keys to efficient mail-handling procedures.		
3. Identify the three steps in processing incoming mail.		
4. Name the three types of outgoing mail.		

PERFORMANCE CHART

I. PREPARATION FOR UNIT

A. Preview the unit. Gather supplies and material necessary to supplement the unit.

B. Obtain the following brochures and books from the U. S. Postal Service for use when discussing the information sheet or when completing the activity sheets.

1. A Consumer's Directory of Postal Services and Products
2. Domestic Mail Manual
3. Packaging Pointers
4. National ZIP Code Directory
5. ZIP Plus-4 Code
6. Mailer's Guide, Publication No. 19
7. Postal Rates, Fees, and Information

C. Obtain brochures regarding mail-handling equipment from the companies listed in the Resource section.

D. Arrange for the class to visit the mail-handling facilities in a large company to observe the operations and equipment uses.

E. Arrange for a vendor, such as Pitney-Bowes, to demonstrate and explain mail-handling equipment.

F. Design a bulletin board using some of the brochures and pictures obtained from the post office and from manufacturers of mail-handling equipment.

II. UNIT OUTLINE

A. Discuss the unit and specific objectives.

B. Add objectives, if necessary, to meet fully the needs of the students.

III. UNIT OVERVIEW AND ACTIVITIES

A. Processing incoming mail

1. Discuss the terms and definitions.
   a. Add additional definitions, if necessary.
   b. Provide examples to facilitate the discussion.
2. Discuss the key to efficient mailing procedures.
3. Discuss the steps in processing incoming mail.
   a. Provide examples of supplies used.
   b. Explain the procedure for sorting mail.
   c. Discuss the procedures for processing correspondence.
      (1) Demonstrate the procedures.
      (2) Provide examples of annotated letters.
   d. Discuss and demonstrate the procedures for opening other mail.

4. Discuss the steps in prioritizing and routing the mail.

   a. Demonstrate the steps.

   b. Provide samples of prioritized mail to facilitate the discussion.

5. Have students complete activities on:

   a. Annotating letters

   b. Prioritizing mail

B. Processing outgoing mail

1. Discuss the terms and definitions.

   a. Add additional definitions, if necessary.

   b. Use the brochures obtained from the manufacturers to illustrate a communicating word processor and a facsimile.

2. Discuss the types of mailing systems.

   a. Use pamphlets obtained from the U. S. Post Office when discussing the services provided.

   b. Provide examples of the different types of private mailing and shipping systems.

   c. Provide illustrations of electronic mail systems to facilitate the discussion.

      (1) Arrange for a vendor to speak to the class about the use of electronic mail equipment.

      (2) Arrange for the class to visit a company that uses an electronic mail system.

      (3) Discuss the steps for preparing outgoing mail.

         a. Provide samples of various types of mail-handling equipment used to process the mail.

         b. Arrange for a secretary to visit the class to discuss the procedures for preparing outgoing mail.

4. Have students complete activities on:

   a. Determining postal services

   b. Determining postal rates

   c. Determining private carrier services

IV. UNIT TEST

A. Various methods may be used for administering the test.

1. May be used as an additional activity sheet.

2. Each part may be given as the information is completed.

3. May be given upon completion of the entire unit.

B. Add test parts for any information added to the unit.

I. TERMS AND DEFINITIONS

A. Annotate--the process of writing notes or comments in the margins of a letter or underlining important information for the employer to refer to when reading correspondence

B. Mail register--a form used to record special incoming and outgoing mail to verify receipt and disposition of mail

C. Scan--the process of reading through correspondence to pick out important information for your employer's attention

II. KEY TO EFFICIENT MAIL-HANDLING PROCEDURES

A. Use good scales.

B. Keep up to date on regulations.

C. Use trays for outgoing mail.

D. Mail early and use ZIP codes.

E. Understand what each special service means and when to use it (special delivery, express mail, etc.)

F. Use a less expensive class of mail or bulk rates when possible.

G. Eliminate unnecessary correspondence.

H. Set priorities for sorting incoming mail (urgent, routine, etc.)

I. Set times for pick-up and delivery of mail.

J. Use express mail for domestic or international mail that requires special handling.

K. Maintain current mailing lists.

L. Reduce the weight of mailed items by printing on both sides of the paper, using smaller stationery, using a postal card, etc.

M. Double-check accuracy of the mailing scales.

N. Bundle mail by combining all mail to the same address into one packet, and eliminate individual envelopes.

O. Make certain envelopes and packages are clearly marked for class to receive proper service for the money.

P. Consider the use of other carriers for mail that does not have to go first class.

Q. Presort large volumes of outgoing mail to take advantage of discounts offered by the U. S. Postal Service.

III. STEPS IN PROCESSING INCOMING MAIL

A. Sort the mail.

B. Process the mail.

C. Prioritize and route the mail.

IV. SORT THE MAIL

A. Gather necessary supplies, such as:

1. Letter opener
2. Paper clips
3. Tape
4. Date stamp and pad
5. Pen or pencil
6. Mail register
7. Routing slips

B. Sort the mail into four stacks.

1. Correspondence, such as first-class letters, invoices
2. Advertising, such as brochures, catalogs, circulars
3. Newspapers and periodicals
4. Packages

V. PROCESS THE MAIL

A. Process correspondence.

1. Open envelopes with a letter opener.

a. Set aside mail marked "personal" or "confidential" for your employer to open.

b. Be careful not to tear contents when opening.

2. Remove the contents from the envelopes.

   a. Attach enclosures with paper clips to the back of the correspondence.

   b. Make a notation on correspondence if any enclosures are missing.

   c. Mend any torn contents with tape.

3. Make sure the return address is on all correspondence. If not,

   a. Attach the envelope to the back of the correspondence, or

   b. Write the address on the correspondence.

4. Use either a date stamp or pen to mark "Rec'd and the date" in the upper right-hand corner of all correspondence.

5. Record any special mail, such as registered, certified, in the mail register.

6. Scan and annotate correspondence.

   (NOTE: This step should be omitted if your employer prefers to do this.)

   a. Read through each piece of correspondence to pick out important information, such as:

      (1) Reference to previous correspondence

      (2) Request for an appointment

      (3) Reference to a due date

      (4) Request for information

   b. Make notes or comments in the margins for your employer to refer to when reading the letter.

   c. Underline important information in the body of the letter.

   d. Attach previous correspondence or material to the letter if it will help your employer in responding or if a reference was made to it.

   e. Make notes on your calendar if a request was made for an appointment or if there was a reference to a due date.

7. Sort correspondence into three stacks.

   a. Mail for your employer

   b. Mail requiring someone else's attention

   c. Mail requiring your attention

B. Process other mail.

   1. Advertising

      a. Open and organize contents of the mail.

      b. Sort into stacks based on who will receive the mail.

   2. Newspapers and periodicals

      a. Unwrap and flatten out newspapers.

      b. Scan and mark articles of interest to your employer.

   3. Packages

      a. Open packages.

         (NOTE: Do not open packages marked "personal" or "confidential.")

b. Check contents against the enclosed packing slip or invoice.

VI. PRIORITIZE AND ROUTE THE MAIL

A. Sort mail into three stacks based on importance.

1. Urgent

a. Includes any items requiring immediate attention, such as airmail, certified, registered

b. Should be placed on the top of stack so it is the first thing the employer sees

2. As-soon-as-possible (ASAP)

a. Includes any items which should be taken care of before the end of the day, such as first-class, personal, and confidential mail, memorandums

b. Should be placed beneath the mail considered urgent

3. Routine

a. Includes all other classes of mail which may be taken care of as time permits, such as bills, reports, advertising, newspapers, routine inquiries

b. Should be placed at the bottom of the stack

B. Route the mail

1. Place mail on employer's desk.

2. Prepare a routing slip for mail which requires someone else's attention. Attach the slip to the correspondence and deliver to the appropriate person.

ROUTING SLIP

ROUTING SLIP		
FROM: _____		DATE: _____
TO:	1. _____	4. _____
	2. _____	5. _____
	3. _____	6. _____
FOR:	☐ Approval	☐ See Me
	☐ File	☐ Signature
	☐ Necessary Action	☐ Comment
	☐ Note and Return	☐ Information
	☐ Recommendation	_____

ELECTRONIC CALCULATOR

75.89(b)(3)(A) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT--OFFICE
MACHINES

Employ the touch system for computation of simple and complex mathematical problems using the electronic calculator.

ELECTRONIC CALCULATOR

UNIT OBJECTIVE

The student will be able to employ the touch system for computation of simple and complex mathematical problems using the electronic calculator. This knowledge will be evidenced through demonstration and by successful completion of the unit test.

SPECIFIC OBJECTIVES

1. Know terms and definitions necessary for understanding the electronic calculator and its operations.
2. Know the names of the major operational keys with their descriptions and uses.
3. Demonstrate the ability to:
   a. Add, substract, multiply, and divide on the electronic calculator
   b. Use the electronic calculator to compute percentages, discounts, and proration

TEACHER ACTIVITIES

1. Preview the unit.
2. Add material, if needed, to supplement information and activities in the unit.
3. Discuss objectives with students.
4. Discuss the information in the unit overview with students.
5. Use the overhead projector to teach the touch system on the electronic calculator and emphasize correct fingering techniques.
6. Explain all activities and steps to solving various types of business problems assigned.

STUDENT ACTIVITIES

1. Identify terms associated with the electronic calculator.
2. Demonstrate the ability to add, substract, multiply and divide employing the touch system.
3. Demonstrate the use of the electronic calculator to compute percentages, discounts, and proration.

EVALUATION -- Unit Test

ESTIMATED COMPLETION TIME

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section

RESOURCES

ACTIVITIES HANDBOOK FOR TEACHING WITH THE HAND-HELD CALCULATOR
Allyn and Bacon

CAPITOL AUDITING SERVICE: A CALCULATOR SIMULATION
Houghton Mifflin Publishing Co.

MICROCOMPUTER KEYPAD OPERATIONS
1 disk and documentation, for:
Apple, TRS-80 Model III or IV,
IBM-PC
Career Aids, Inc.

OFFICE MACHINES
text-workbook
Houghton Mifflin Publishing Co.

OFFICE MACHINES COURSE
Southwestern Publishing Co.

RPM UNLIMITED: A BUSINESS MACHINES PRACTICE SET, 2nd ed.
Gregg Division/McGraw-Hill Book Co.

OBJECTIVE: The student will be able to employ the touch system for computation of simple and complex mathematical problems using the electronic calculator. This knowledge will be evidenced through demonstration and by successful completion of the unit test.

	MASTERY	NON MASTERY
1. Know terms and definitions necessary for understanding the electronic calculator and its operations.		
2. Know the names of the major operational keys with their descriptions and uses.		
3. Demonstrate the ability to:		
a. Add, subtract, multiply, and divide on the electronic calculator		
b. Use the electronic calculator to compute percentages, discounts, and proration		

PERFORMANCE CHART

I. GENERAL INFORMATION

This unit is simply meant to be an introduction to the electronic calculator. It is possible to introduce the function of the keys and the placement of hands for touch operation of the calculator as a battery unit. However, for competency in operating the calculator by the touch system, it is necessary to use drill books for practice. Many different drill books are listed in the resources section of the outline.

Because of the variety and complexity of types of business problems performed on the calculator, only a few are explained in this unit. Again, materials are available that will reinforce and give extra practice on these problems.

II. PREPARATION FOR UNIT

A. Preview the unit.

B. Add material, if needed, to supplement the information and activities in the unit.

C. Verify that the machines available are in working order.

D. Check the procedures in the supplementary to see whether they are applicable to the machines the students will be using.

E. Modify instructions, if necessary, and have the operator's manual available for the student's machines.

III. OBJECTIVE SHEET

A. Discuss the unit objectives.

B. Discuss each of the specific objectives.

C. Add any objectives necessary to meet fully the needs of the unit and the students.

IV. UNIT OVERVIEW

A. Discuss the terms and definitions related to the electronic calculator.

B. Explain and demonstrate the operational keys. Use TM-1--ELECTRONIC CALCULATOR to aid this preliminary explanation. Modify the key descriptions to fit those keys available on the model of calculator used in your classes.

C. Demonstrate and discuss the preparations for using the electronic calculator.

D. Explain the touch system. Demonstrate the touch system and emphasize correct fingering techniques. Use TM-2--HOME ROW POSITION as an aid for students working at their desks.

V. ACTIVITY SHEETS

A. Demonstrate the procedure for each Activity Sheet as it is presented.

B. Emphasize the importance of recording answers correctly. Stress proper placing of commas and decimals and indication of credit balances.

C. Have students complete the activity sheets.

D. Provide activities for any information added to unit.

VI. ANSWERS TO ACTIVITY SHEETS

A. Assign values to each activity.

B. Add corresponding answers for any supplementary activities which you have added.

VII. UNIT TEST

A. Covers material presented in the unit overview

B. May use various methods of administering the test:

1. Give each part of the test as the information is completed.

2. Use as daily quizzes.

3. Administer upon completion of the unit.

4. Use as an additional assignment.

C. Add test parts that correspond to any information added to the unit.

I. TERMS AND DEFINITIONS

A. Add-mode--(decimal selector set at "+") tells the calculator to automatically register the decimal between dollars and cents; operator doesn't have to enter decimal with each amount

B. Clear entry key--usually identified by "CE"; removes only the last number indexed; not usable if another operational key has already been depressed

C. Credit balance--a negative balance obtained when the amount subtracted is greater than the amount added; identified by a minus sign in the display (-), or by minus sign or letters "CR" on tape

D. Decimal key--identified by"."; enters a decimal when depressed

(NOTE: Decimal automatically appears to the right of every number unless entered otherwise with decimal key.)

E. Decimal selector--a switch, usually with settings from 0 to 4, which allows the operator to preset where the decimal will appear in a final answer

F. Discount--an amount subtracted from a regular price

G. Home row--the middle row of keys (4, 5, 6) on a ten-key keyboard

H. Index a number--depress the numeric keys of a number in order from left to right

I. Memory key--tells the calculator to set aside and remember for later use (store in memory) a number or numbers; when a number is stored in memory, an "M" appears in the upper left corner of the display

1. Memory plus key--identified by "M+"; tells the calculator to enter the number just indexed into memory or to add the number to what is already in memory

2. Memory minus key--identified by "M-"; tells the calculator to store the number just indexed as a negative amount or to subtract the number from what is already in memory

3. Memory recall key--identified by "MR"; tells the calculator to show the amount that is stored in memory

4. Memory clear key--identified by "MC"; tells the calculator to remove (clear) all that has been stored in memory

(NOTE: The numbers in memory or the computations performed in memory do not affect the other numbers in the register.)

J. Operational keys--the keys of the electronic calculator which perform various functions, such as addition, subtractions, multiplication, division, total key

K. Percent key--identified by "%"; tells the calculator to compute the percent just indexed

L. Prorate--to divide or to assess proportionately

M. Register--the inner mechanism of the calculator where computation is performed

N. Ten-key keyboard--a keyboard arrangement in which there are ten numeric keys (1-9) arranged in three rows of three each, with an additional key or bar (0) at the bottom of the last row; in addition to the numeric keys, there are various operational keys

O. Touch method of operation--a means of operating a ten-key keyboard by touch rather than by sight; fingers remain "on base" at home row except when striking other keys

II. OPERATIONAL KEYS

Below are listed the most common operational keys on the electronic calculator. Various models will have more or fewer keys, depending upon the manufacturer of the machine.

A. Plus key--identified by "+"; used in addition

B. Minus key--identified by "-"; used in subtraction

C. Multiplication key--identified by "x"; used in multiplication

D. Division key--identified by "÷"; used in division

E. Equals key--identified by "="; tells the calculator to complete a computation and show the answer

F. Total key--identified by"T" or by "*"; tells the calculator to show the total of a calculation. Clears the rest.

G. Clear key--identified by "C"; removes (clears) information from the register and readies the calculator to accept new problem

III. PREPARATIONS FOR USING THE ELECTRONIC CALCULATOR

A. Clear work space of unnecessary items.

B. Place the calculator to your right, working materials (workbook or paper, pencil) to your left.

C. Sit straight, feet flat on floor.

D. Curve your index, middle, and ring fingers over the home row keys.

(NOTE: Correct posture is important for your comfort and for insuring speed and accuracy.)

IV. USING THE TOUCH METHOD

A. Use these fingers to operate the home row keys.

1. Index finger - 4 key
2. Middle finger - 5 key
3. Ring finger - 6 key

B. Use the "home row" fingers to strike the following keys.

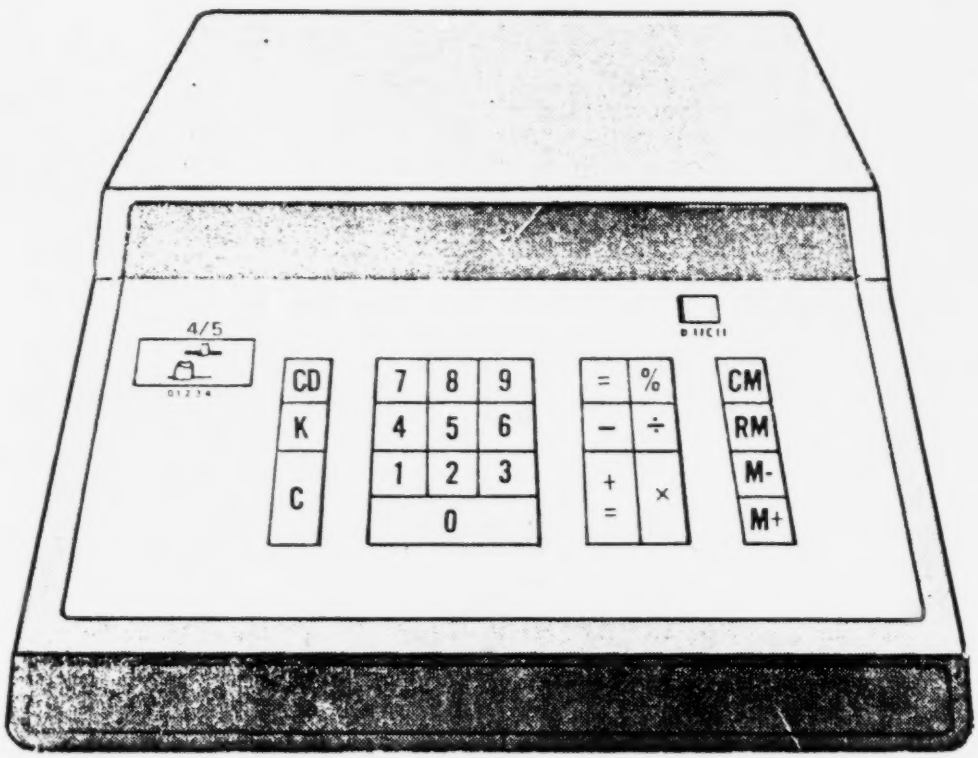
1. Index finger
   a. Reach up from the 4 key to strike the 7 key.
   b. Reach down from the 4 key to strike the 1 key.
2. Middle finger
   a. Reach up from the 5 key to strike the 8 key.
   b. Reach down from the 5 key to strike the 2 key.
3. Ring finger
   a. Reach up from the 6 key to strike the 9 key.
   b. Reach down from the 6 key to strike the 3 key.

C. Use the thumb to strike the 0 key.

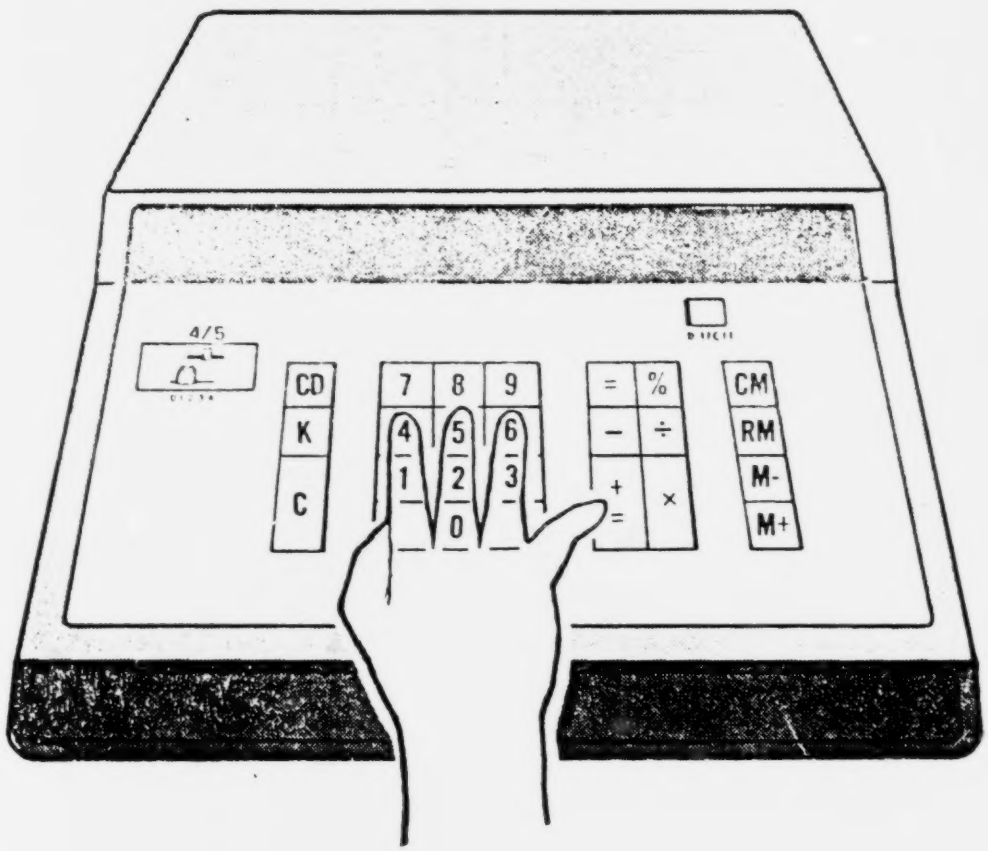
D. Use the little finger to strike the operational keys to the right of the numeric keyboard.

E. Use the index finger to strike operational keys to the left of the numeric keyboard.

ELECTRONIC CALCULATOR



HOME ROW POSITION



COPY MACHINES

75.89(b)(3)(B) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT--OFFICE
MACHINES

Understand and demonstrate skills needed in operating copy machines.

COPYING MACHINES

UNIT OBJECTIVE

The student will be able to understand and demonstrate skills needed in operating copying machines.

SPECIFIC OBJECTIVES

1. Define terms associated with copy machines.
2. List the advantages of the types of copiers most commonly used in business.
3. Explain the process involved to collate documents automatically.

TEACHER ACTIVITIES

1. Gather copies of office magazines with articles on new technology in copiers.
2. Prepare a bulletin board using pictures of copy machines with new and sophisticated features.
3. Prepare to take students to an office or classroom with a modern copy machine and demonstrate procedures involved for copying originals, copying cut and pasted originals, reducing and enlarging.
4. Demonstrate an automatic collator, if possible.

STUDENT ACTIVITIES

1. Discuss six advantages of copying machines.
2. Discuss advantages and disadvantages of each type of copying machine.
3. Demonstrate the use of a copying machine for the following uses:
   A. With a corrected original
   B. To reduce a document
   C. To enlarge a document
4. Demonstrate the use of an automatic collator.

EVALUATION-Unit Test

ESTIMATED COMPLETION TIME-2 - 4 hours

UNIT OUTLINE

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section.

RESOURCES

GENERAL OFFICE PROCEDURES
Gregg/McGraw-Hill Publishing Co.

SECRETARIAL OFFICE PROCEDURES
Southwestern Publishing Co.

OFFICE SYSTEMS AND PROCEDURES
Houghton Mifflin Publishing Co.

75.89(b)(3)(B)

OBJECTIVE: The student will be able to understand and demonstrate skills needed in operating copying machines.

	MASTERY	NON MASTERY
1. Define terms associated with copy machines.		
2. List the advantages of the types of copiers most commonly used in business.		
3. Explain the process involved to collate documents automatically.		
4. Demonstrate the use of a copying machine for the following uses:		
A. With a corrected original		
B. To reduce a document		
C. To enlarge a document		
5. Demonstrate the use of an automatic collator.		
Unit Test		

PERFORMANCE CHART

I. TERMINOLOGY

A. Reprographics--all procedures and machines involved in reproducing printed material

B. Original--the document that is being copies

C. Master--a source for duplication

D. Transparency--image used as plastic overlay to be projected onto a screen

E. Transparency master--an image used to make a plastic overlay which will be projected onto a screen

F. Collate--to assemble material into sets

II. TYPES OF COPIES

A. Electrostatic copier

1. Electrostatic copies produce dark black copies that look like original.

2. Corrections or additions can be made to original without being visible on copy.

3. Electrostatic copiers are the most used by offices.

B. Infrared copier

1. This copier is very fast.

2. Special paper must be used.

3. The material to be copied must contain carbon.

4. Offset masters, stencils, and transparency masters can be prepared on the infrared copier.

III. ADVANTAGES OF COPY MACHINES

A. Letters and other documents can be reproduced rapidly.

B. Copies can be reproduced exactly from the original or with corrections to the original.

C. Copiers are economical for a few copies.

D. Copiers are easy to operate.

E. Color copies can be made although it is an expensive process.

F. Company letterhead or colored paper can be used.

G. Some copiers can reproduce copies that are reduced or enlarged in size.

H. Transparencies can be prepared on some copiers.

I. Several different sizes of paper can be stored on some copiers, and the size paper needed is selected.

IV. COLLATING

A. It is sometimes easier to collate small amounts of material by hand.

1. Place copies of each page in stacks on a table.

2. Lift the top page from each stack until all copies have been assembled.

B. Automatic collators

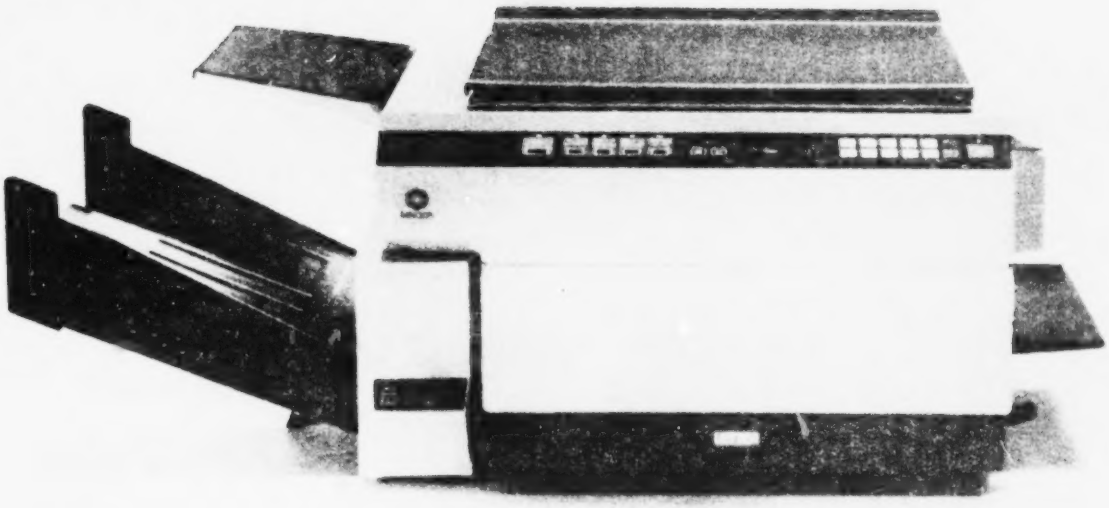
1. Automatic collators are used for jobs with a large number of copies.

2. Stack pages in separate compartments of the collator.

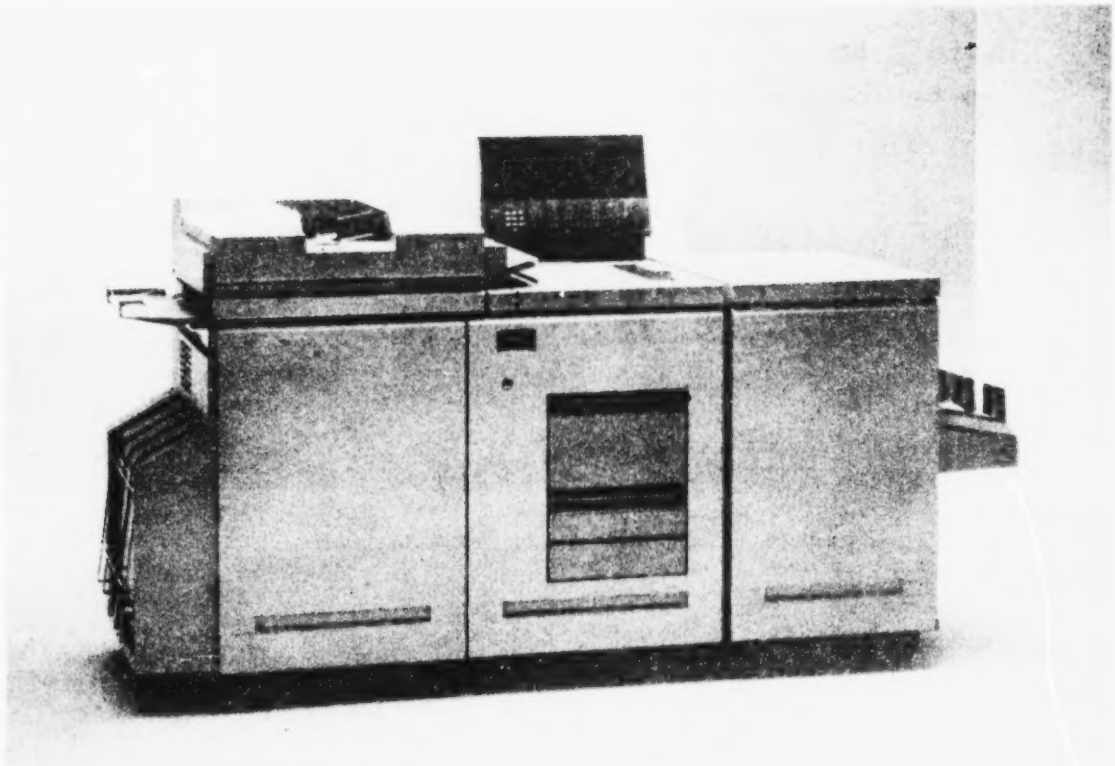
3. A page is pushed out of each compartment when the foot control is pushed.

4. Pages are gathered in sets and crisscrossed for stapling each time the foot control is pressed.

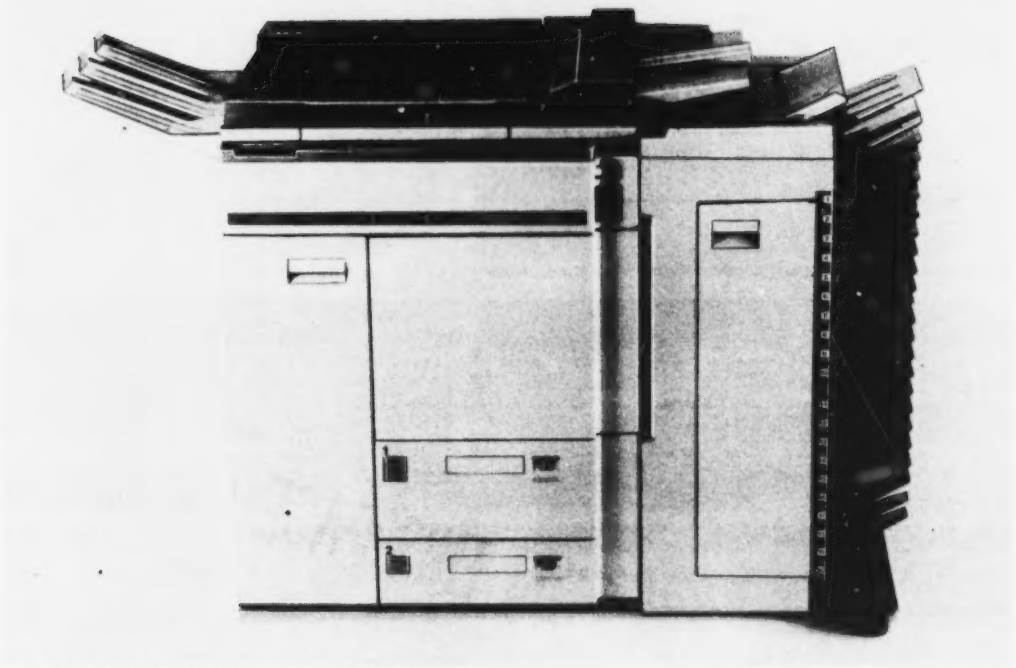
5. Some collators are operated by an on/off switch.



Minolta Beta 350Z Copier. Courtesy of Minolta Corporation's Business Equipment Division.



Xerox 1090 Marathon Copier. Courtesy of Xerox Corporation.



Ricoh Copier FT6080 Console Copier. Courtesy of Ricoh Corporation.

IBM System/36. Courtesy of International Business Machines Corporation.

DATA/WORD PROCESSING EQUIPMENT

75.89(b)(3)(C) SECRETARIAL AND GENERAL OFFICE
ESSENTIAL ELEMENT--OFFICE
MACHINES

Demonstrate the process required in operating data/word processing equipment

DATA/WORD PROCESSING EQUIPMENT

UNIT OBJECTIVE

The student will be able to demonstrate the process required in operating data processing and word processing equipment.

SPECIFIC OBJECTIVES

1. Define terms associated with word processing and data processing equipment.
2. Identify three types of stand-alone systems.
3. Identify two types of equipment that can be interfaced with word processing equipment.
4. Identify the printing mechanisms used to print out the information which has been stored.
5. Identify basic components of a microcomputer.
6. Identify the skills and attitudes required of word processing and data processing operators.
7. Demonstrate the skills required in operating word processing and data processing equipment.

TEACHER ACTIVITIES

1. Order films from sources provided in Resource Section.
2. Provide magazine articles for up-to-date resource material.
3. Obtain brochures and information on word/data processing.
4. Gather resources to supplement the unit.
5. Design a bulletin board with illustrations of various kinds of word and data processing equipment.
6. Discuss objectives and information in Unit Overview.
7. Arrange for an equipment vendor to visit class and demonstrate a machine.
8. Use a workbook, software, or practice sets to enable the students to demonstrate their ability to operate each kind of word/data processing machine available.

STUDENT ACTIVITIES

1. Discuss Unit Overview and objectives of the unit.
2. See films describing word/data processing equipment.
3. Identify stand-alone systems, equipment that can be interfaced, and printing mechanisms used with word/data processing equipment.
4. Identify software used for word processing and software used for data processing on machines used in the classroom.
5. Identify basic components of a microcomputer.
6. Demonstrate the ability to operate the word/data processing equipment available in your classroom.
7. Demonstrate the ability to use software and simulated practice activities on the word/data processing equipment available in your classroom.

EVALUATION- Unit Test

ESTIMATED COMPLETION TIME 5 to 10 hours

RETEACH ACTIVITIES

It is suggested that reteach activities be developed from the following sources:

1. Unit activities not used
2. Combination of used activities
3. Sections of unit test that need additional reinforcement
4. Additional activities and individualized simulation materials from the resources section.

RESOURCES

COMPUTER EXPLORATIONS FOR BUSINESS
text-workbook
Gregg/McGraw-Hill Publishing Co.

CONCEPTS OF DATA PROCESSING
slides and cassette tape, student projects
Milady Publishing Co.

DISK, FILES AND PRINTERS FOR APPLE II
Bobbs-Merrill Educational Publishing

INTRODUCTION TO APPLE II BASIC
Houghton Mifflin Publishing Co.

INTRODUCTION TO THE TRS - 80 BASIC
Houghton Mifflin Publishing Co.

INTRODUCTION TO WORD PROCESSING
Bobbs-Merrill Educational Publishers

INTRODUCTION TO WORD PROCESSING
Winthrop Publishers, Inc.

MANAGEMENT OF WORD PROCESSING OPERATIONS
Benjamin/Cummings Publishing Co.

PERSONAL COMPUTERS HANDBOOK
Walter H. Buschbaum
Bobbs-Merrill Educational Publishing

TRS - 80 WORD PROCESSING APPLICATIONS USING SUPERSCRIPT
Prentice-Hall Media

WORD PROCESSING
Milliken Publishing Co.

WORD PROCESSING, A COMPREHENSIVE TRAINING PROGRAM
ESP, Inc. Productions

WORD PROCESSING CONCEPTS
South-western Publishing Company

WORD PROCESSING EXERCISES FOR WORD PROCESSORS, MICROCOMPUTERS AND ELECTRONIC TYPEWRITERS
Prentice-Hall Media

WORD PROCESSING ON THE IBM PC
Bobbs-Merrill Educational Publishing

WORD PROCESSING: OPERATIONS, APPLICATIONS, AND ADMINISTRATION
Bobbs-Merrill Educational Publishers

WORD PROCESSING SKILLS AND APPLICATIONS USING WANG SYSTEMS
Prentice-Hall Media

Magazines

ADMINISTRATIVE MANAGEMENT
P. O. Box 544
Martinsville, NJ 08836

MODERN OFFICE PROCEDURES
P. O. Box 95759
Cleveland, OH 44101

THE OFFICE
Office Publications
P. O. Box 13205
Philadelphia, PA 19101

THE SECRETARY
National Secretaries Association
World Headquarters
2440 Pershing Road, Suite G-10
Kansas City, MO 64108

WORDS
IWP Association
Maryland Road
Willow Grove, PA 19090

WORD PROCESSING WORLD
Geyer-McAllister Publishers, Inc.
51 Madison Avenue
New York, NY 10010

Films

IBM Motion Picture Library
Modern Talking Pictures Services
2323 New Hyde Park Road
New Hyde Park, NY 11040

Information Management Corporation
P. O. Box 787
Solana Beach, CA 92075

The Secretary
National Secretaries Association
World Headquarters
2440 Pershing Road, Suite G-10
Kansas City, MO 64108

Manufacturers

AM JACQUARD SYSTEMS
Dept. 777
3340 Ocean Park Boulevard
Santa Monica, CA 90405

COMPTEK RESEARCH, INC.
One Technology Center
45 Oak Street
Buffalo, NY 14203

DATAPOINT CORPORATE COMMUNICATIONS
MO-K05
9725 Datapoint Drive
San Antonio, TX 78284

DEST DATA CORPORATION
2380 Bering Drive
San Jose, CA 95131

DICTAPHONE CORPORATION
120 Old Post Road
Rye, NY 10580

IBM
General Systems Division
P. O. Box 2068
Atlanta, GA 30301

LANIER
P. O. Box 1555
Atlanta, GA 30301

LEXITRON CORPORATION
9600 DeSoto Avenue
Chatsworth, CA 91311

NBI
1695 38th Street
Boulder, CO 80301

NCE Supply
915 West Liberty Drive
Wheaton, IL 60187

OYX
Exxon Information Systems
101 Gordon Drive
Lionville, PA 19353

RADIO SHACK
Tandy Corporation
1300 One Tandy Center
Fort Worth, Texas 76102

VYDEC, INC.
9 Vreeland Road
Florham Park, NJ 07932

WANG LABORATORIES, INC.
1 Industrial Avenue
Lowell, MA 01851

XEROX CORPORATION
Office Products Division
1341 W. Mockingbird Lane
Dallas, Texas 75247

ZENITH DATA SYSTEMS
1909 E. Cornell
Peoria, IL 61614

75.89(b)(3)(C)

OBJECTIVE: The student will be able to demonstrate the process required in operating data processing and word processing equipment.

	MASTERY	NON MASTERY
1. Define terms associated with word processing and data processing equipment.		
2. Identify three types of stand-alone systems.		
3. Identify two types of equipment that can be interfaced with word processing equipment.		
4. Identify printing mechanisms used to print out the information which has been stored.		
5. Identify basic components of a micro-computer.		
6. Identify the skills and attitudes required of word processing and data processing operators.		
7. Demonstrate the skills required in operating word processing and data processing equipment.		

PERFORMANCE CHART

I. TERMS AND DEFINITIONS

A. Cathode Ray Tube Screen (CRT)--a component of the display text-editor (as material is keyboarded, it appears on the CRT screen)

B. Editing--correcting and revising a copy before it is put into final form and printed

C. Facsimile--a device which transmits a picture of the hard copy over existing telephone lines

D. Hard copy--written, typed, or printed copy; a document

E. Hardware--the electrical, electronic, magnetic, and mechanical devices used in a system

F. Interface--linking two machines or systems together

G. Line printer--a device which prints a line at a time

H. Logic--the instructions which are programmed into a system to make it perform all designated functions; for example, automatic underlining or centering

I. Mode--the operating conditions of a unit; for example, the ability to record or playback

J. Output--the final results after input material is processed, revised, and printed out

K. Playback--the printing out of information which has been recorded

L. Repetitive typing--documents. such as form letters, which are played back over and over

M. Revision--editing and making typewritten corrections

N. Shared-logic--several text-editors using the memory and processing powers of a computer

O. Soft copy--information stored on a magnetic medium or on a CRT screen

P. Software--programs which instruct or control the operations of a computer

Q. Terminal--any device (such as communicating text-editor) capable of sending or receiving information over a communications channel

R. Transcribe--to produce a typed document from recorded dictation

S. Transmit--to send from one person or place to another

T. Turnaround time--the actual amount of time that elapses from the point when a document in inputted to that time when it is produced in final, output form

U. Work station--a work area for one person

II. OUTPUT EQUIPMENT

Output equipment is used to process material into a final typewritten form by using either a typewriting device, a printing device, or machine that is interfaced with other word processing equipment. The following information covers devices used to keyboard, store, and print information.

A. Automated Typing Equipment. Two groups of automated typing systems are used to keyboard information:

1. Stand-alone systems are basically self-contained, which means that they are not connected to other equipment in the word processing system. There are three types of stand-alone equipment:

a. Automatic repetitive typewriters are those which can play back keyboarded material from a storage medium. They are primarily used for repetitive work, such as form letters.

b. Mechanical (non-visual text-editors have features which enable the typewriter to perform some typing tasks automatically and a magnetic medi on which to recoru the material being keyboarded. Limited revisions of short documents can be made by this machine. The three components of a mechanical text-editor are:

(1) Keyboard/printing unit, which is used to keyboard and play back the

material. As the material is keyboarded, a copy is prepared on paper and the document is also stored on a magnetic medium. After the copy is proofread and corrected, copies are prepared. The printing device converts the information on the magnetic medium into printed words.

(2) Recording/storage device, which records the material as it is being keyboarded. Most text-editors use a magnetic medium to store information, but some have an internal memory unit on which to store information.

(3) Logic/intelligence device, which is the "brain" of the text-editor. This device directs the functions and operations of the typewriter. It holds the working memory of the machine and can be either a part of the keyboard unit, or a separate console unit which is connected to the keyboard.

c. Display Text-Editors are similar to the mechanical text-editors except that they have greater capabilities. There are four components of a display text-editor:

(1) Visual display terminal, which is composed of the electronic keyboard and the visual screen (CRT). The screen allows the user to see the copy as it is being keyboarded. Corrections and/or revisions are made on the screen by using a cursor (pointer).

(2) Printing device, which is separate from the keyboard unit; enables the user to begin keyboarding a second project while the first is being printed.

(3) Recording and storage device, which records and stores the material as it is keyboarded.

(4) Logic/intelligence device, which is the "brain" of the machine, directs the functions and operations of the typewriter.

2. Interactive typing systems are text-editors which can communicate or interact with computers or other word processing terminals. They communicate by sending or receiving material over telephone or private wire lines.

a. Communicating stand-alone text-editors are similar to the text-editors already discussed, except these text editors can send or receive information by telephone or private wire lines connected to another communicating text-editor or computer.

b. Shared logic text-editors provide for several text-editor keyboard units to share the logic/intelligence and recording/storage components of a computer. These do not have a logic/intelligence unit or a recording storage medium. These computers may be mini-computers connected with a central processing unit (CPU), a large computer which already performs data processing work for the company.

c. Time-sharing text-editors are linked to a computer located at a service bureau which owns the computer. Users of the computer pay a fee for the computer time used. The users have text-editors which serve as terminals to input and send material to the computer. The computer stores and processes the material. The service bureau provides the users with printed copies.

B. Interfaced equipment. As you have already learned, word processing equipment may include interfaced components, such as a computer interfaced with text-editing typewriters. Word processing equipment is now being expanded to interface with other equipment, such as:

1. Photocomposition equipment, which reproduces a copy by photographing on light-sensitive paper. The copy produced holds up to 40 percent more material than a typewritten copy and provides a high-quality copy. Text-editing typewriters are used to keyboard the information onto magnetic medium which is compatible with the typesetting equipment. The photocomposition unit processes the information stored on the magnetic medium into final, printed copy.

2. Optical Character Recognition Reader (OCR), which scans typewritten pages and records information onto a magnetic medium for playback on a printer. The reader eliminates re-keyboarding the typed pages on a text-editor. The OCR is used for both input and output of material.

C. Storage Media. An important part of the text-editing typewriter is the recording medium on which the keyboarded material is stored either for immediate playback or for later use. The following media are available for use in recording/storing information:

1. Perforated paper tape--a strip of paper. As material is keyboarded, holes are punched into the tape to represent keystrokes.

2. Magnetic tape--a strip of plastic coated with a chemical containing magnetized particles; is enclosed in either a cassette or cartridge. These can be erased and used again.

3. Magnetic floppy disks--a magnetic media, which looks like a phonograph record, made of a flexible plastic. These disks can be erased and used again.

a. Flippy disks--a floppy disk which can be recorded on both sides

b. Mini disks--a small floppy disk

4. Core memory--text-editors that are interfaced with a computer use the core memory of the computer to store information. Some typewriters have a core memory as an internal storage medium.

5. Built-in storage devices--some typewriters, such as the memory typewriter, have built-in storage devices which cannot be removed from the typewriter.

D. Printing mechanisms. A variety of printing mechanisms are used to print out the information which has been stored. Some examples:

1. Typebars--the oldest of the printing mechanisms, and the slowest

2. Elements--type sizes and styles may be changed easily; prints faster than the typebar

3. Printwheels--resemble a daisy flower, with a different letter on each spoke; interchangeable; type at a faster rate than either typebars or elements

4. Ink-jet printers--do not strike against the paper on the platen. Instead, ink is sprayed onto the paper, creating the character images. This is one of the fastest printing mechanisms.

I. GENERAL INFORMATION

A. This unit should be individually designed to teach operation of the equipment used in your classroom.

B. A general knowledge of all word/data processing equipment should be given to students.

C. It is suggested that several current publications be used as resources for this unit because the field of technology in equipment is expanding rapidly.

II. PREPARATION FOR UNIT

A. Order films from resources provided in Unit Outline. Preview the films in order to make sure you have chosen the appropriate film to introduce equipment used in word/data processing.

B. Obtain brochures and information on word processing equipment and supplies from the list of manufacturers provided in Resources.

C. Gather any additional resources and references to provide additional information to supplement the unit.

D. Design a bulletin board to introduce the unit using the brochures and pictures obtained from the manufacturers. Categorize the equipment and supplies according to use so students will be able to identify the word/data processing equipment more easily.

E. Arrange for a word processing vendor to visit the class to tell about various word/data processing equipment available. See if the vendor will bring some equipment for demonstration to the class.

F. Arrange for a field trip to a company that has a word processing center or data processing equipment so students will have an opportunity to see the equipment in use.

III. OBJECTIVE SHEET

A. Discuss the unit and specific objectives.

B. Add objectives, if necessary, to meet fully the needs of the students.

IV. UNIT OVERVIEW

A. Input Equipment

1. Discuss the information presented.

2. Have students read and report on an article regarding word or data processing equipment. (Use the magazines subscribed to in Unit I.)

B. Output Equipment

1. Discuss the information presented.

2. Provide examples of the various types of equipment discussed.

3. Have students complete the following activities to reinforce information studied.

V. UNIT TEST

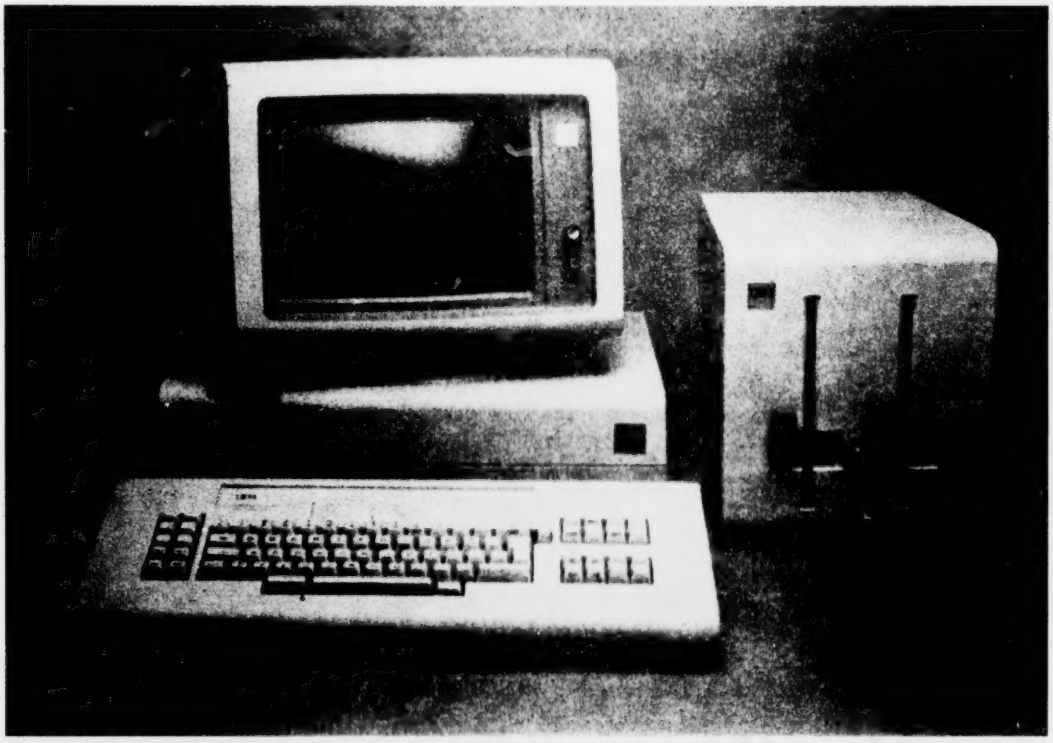
A. Various approaches may be used in testing

1. May be used as an additional activity

2. Each part may be given as the information is completed.

3. May be given upon completion of the entire unit

B. Add test parts for any information added to the unit.



IBM Displaywriter. Courtesy of International Business Machines Corporation.

Altos III Microcomputer. Courtesy of Altos Computer Systems.

TRS-80 Microcomputer Model 2000. Courtesy of Radio Shack, A Division of Tandy Corporation.

TRS-80 Microcomputer Model A. Courtesy of Radio Shack, A Division of Tandy Corporation.

APPENDICES

Appendix A - List of Publishers

Appendix B - Professional Publications

Appendix C - Essential Element Outline for OCL Publications

Appendix D - Scope and Sequence

Appendix E - Classroom Organization

Appendix F - Sample Rotation Plan

Appendix G - Pre-Employment Laboratory Program

Appendix H - Cooperative Program

Appendix I - Training Plan

Appendix J - Essential Elements

APPENDIX A

List of Publishers

ADDISON-WESLEY PUBLISHING CO., INC.
Reading, MA 01867

ALLYN & BACON
College Division
Rockleigh, NJ 07647

AMERICAN BANKERS ASSN.
1120 Connecticut Ave. NW
Washington, DC 20036

ANAHEIM PUBLISHING CO.
2632 Saturn Street
Brea, CA 92621

ARCO PUBLISHING, INC.
Educational Division
215 Park Avenue South
New York, NY 10003

AVA RESOURCES
2020 N. 14th Street
Arlington, VA 22201

BANTAM BOOKS
666 Fifth Avenue
New York, NY 10103

BOBBS-MERRILL
EDUCATIONAL PUBLISHERS
P.O. Box 7080
Indianapolis, IN 46206

ROBERT J. BRADY, CO.
A Prentice-Hall Co.
Bowie, MD 20715

BROOKS/COLE PUBLISHING CO.
540 Abrego Street
Monterey, CA 93940

WILLIAM C BROWN PUBLISHING
2460 Kerper Blvd
Dubuque, IA 52001

CAREER AIDS, INC.
20417 Nordhoff St.
Dept K 65
Chatsworth, CA 91311

CBS COLLEGE PUBLISHING
383 Madison Avenue
New York, NY 10017

CHILTON BOOK COMPANY
School and Library Dept.
Chilton Book Company
Radnor, PN 19089

CHRONICLE GUIDANCE PUB. INC.
Aurora Street Extension
P.O. Box 1190
Moravia, NY 13118-1190

COLLEGE BOARD PUBLICATIONS
The College Board
888 Seventh Ave.
New York, NY 10106

CURRICULUM PUBLICATIONS CLEARINGHOUSE
46 Horrabin Hall
Macomb, IL 61455

CURTIN & LONDON, INC.
135 West 50th Street
New York, NY 10020

datapro
1805 Underwood Blvd.
Delran, NJ 08075

DELMAR PUBLISHING INC.
2 Computer Drive West
Box 15-015
Albany, NY 12212

THE DRYDEN PRESS
P.O. Box 36
Lavallette, NJ 08735

EDITS
P.O. Box 7234
San Diego, CA 92107

EDUCATIONAL FILMSTRIPS
1405 19th Street
Huntsville, TX 77340

GLENCOE PUBLISHING CO.
8301 Ambassador Row
Dallas, TX 75247

GLENCOE PUBLISHING CO.
17337 Ventura Blvd.
Encino, CA 91316

GREGG/MCGRAW HILL
13955 Manchester Road
Manchester, MD 63011

GREGG DIVISION
McGraw-Hill Book Co.
1221 Avenue of the Americas
New York, NY 10020

HARPER & ROWE
6780 Sierra Court
Suite N
Dublin, CA 94566

HARPER & ROWE
Keystone Ind. Park
Scranton, PA 18512

HARPER & ROWE, PUBL
10 East 53rd St
New York, NY 10022

HBJ/MEDIA SYSTEMS CORP.
757 Third Avenue
New York, NY 10164

HEMPHILL
1400 Wather
Austin, TX 78703

HOUGHTON MUFFLIN CO.
One Beacon Street
Boston, MA 02107

IRWIN PUBLISHING CO.
1818 Ridge Road
Homewood, IL 60430

MPC EDUCATIONAL PUBLISHERS
3839 White Plains Road
Bronx, NY 10467

MAYFIELD PUBLISHING CO.
285 Hamilton Avenue
Palo Alto, CA 94301

MEDIA SYSTEMS, INC.
757 3rd Avenue
New York, NY 10017

CHARLES E. MERRILL PUB. CO.
1200 Alum Creek Drive
Columbus, OH 43216

MILLIKEN PUBLISHING CO.
Box 21579
St. Louis, MO 63132

NATIONAL OCCUPATIONAL CO. TESTING INSTITUTE
318 Johnson Hall
Ferris State College
Big Rapids, MI

NATIONAL PUBLIC RADIO
Cassette Catalog
Cassette Publishing
2025 M Street N.W.
Washington, DC 20036

NATIONAL TEXTBOOK CO.
4255 West Touhy Avenue
Lincolnwood, IL 60646-1975

OHIO STATE UNIVERSITY
Vocational Instructional Materials Laboratory
154 W. Twelfth Ave.
Columbus, OH 43210-1302

PEARSON
9219 Chimney Corner
Dallas, TX 75243

PRENTICE-HALL INC.
Englewood Cliffs, NJ 07632

PRENTICE-HALL MEDIA
ServCode DX
150 White Plains Rd.
Tarrytown, NY 10591

RADIO SHACK
EDUCATION DIVISION
1400 One Tandy Center
Ft. Worth,TX 76102-2805

RANDOM HOUSE SCHOOL DIV.
Dept. 9232
400 Hahn Road
Westminister, MD 21157

REAL ESTATE EDUCATION CO.
500 N. Dearborn Street
Chicago, IL 60610

REAL ESTATE PRESS
18710 Middletown Rd.
Parktown, MA 21120

RESTON PUBLISHING CO.
A Prentice-Hall Co.
11480 Sunset Hills Road
Reston, VA 22090

THE H.M. ROWE CO.
624 N. Gilmore Street
Baltimore, MD 21217

SCIENCE RESEARCH ASSN. INC.
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Portland, MA 04104-0658

JOHN WILEY & SONS, INC.
605 Third Avenue
New York, NY 10158

APPENDIX B

Business Journals

Business Education Journal
Emporia State University
Division of Business and Business Education
1200 Commercial St.
Emporia, KS 66801
The journal contains general business topics with emphasis on business production and teacher education.

Business Education World
Gregg Division
McGraw-Hill Book Company
1221 Avenue of the Americas
New York, NY 10020
Innovative application of teaching methodology, educational concepts, descriptions of new curricula and trends all in business and office education subjects. Free to business teachers.

Business Educational Forum
National Business Education Assn
1914 Association Drive
Reston, VA 22091
The journal features articles for teachers of secretarial programs, typewriting, accounting, clerical programs, basic business, as well as economics, marketing and distribution, communications, and data processing.

Business Horizons
Graduate School of Business
Indiana University
Bloomington, IN 47405
Articles by academics and business people on significant business issues, trends, and research projects.

Delta Pi Epsilon Journal
Delta Pi Epsilon National Office
Gustovus Adolphus College
St. Peter, MN 56082
Devoted to research articles dealing with theory, practice, and research in business education.

Journal of Business Education
Heldref Publications
4000 Albemarle St. NW
Washington, DC 20016
A journal dealing with business education from high school to community college level. Contributors are principally teachers and academics.

VOCED
formerly American Vocational Journal
2020 N. 14th Street
Arlington, VA 22201
The journal of the American Vocational Association published for teachers, administrators, counselors, and laypersons involved in the task of preparing people for work. The journal gives a balanced view of both the theoretical and practical aspects of vocational education.

Newsletters

The Office Professional
1316 Sam Bass Circle
Round Rock, TX 78664
Provides reliable information about office systems and procedures, secretarial methods, management thinking, and office technology. Also features articles on communication techniques, professional human relation skills, and the latest approaches to career development.

Open Entries
The Center for Studies in Vocational Education
Florida State University
Stone Building
Tallahassee, FL 32306
A nationwide communication link for educators involved in competency-based vocational education that encourages exchange of information on competency-based learning materials, development of new guides, packets, audiovisual materials and computer-based resources.

Texas Business Educator
Texas Business Education Assn.
P.O. Box 15915
Austin, TX 78752
A semiannual bulletin of the activities of the Texas Business Education Association plus articles of current interest to business educators.

Viewpoints in Business Education
Milady Publishing Corp.
3839 White Plains Road
Bronx, NY 10467
A teaching methods and materials newsletter for business education teachers.

The Balance Sheet
South-Western Publishing Co.
11310 Gemini Lane
Dallas, TX 75229
The publication is free to teachers and features articles of current interest relating to business and economic course offerings at the high school and post-secondary levels.

Modern Office Procedures Magazines
Pent/IPC
1111 Chester Avenue
Cleveland, OH 44114
Business/office market magazine featuring office procedures and utilization of new technological developments in computers, business machines, furnishings, and supplies.

The Office
Office Publications, Inc.
1200 Summer Street
Stamford, CT 06904
The magazine discusses many aspects of office practice and management for both executives and office managers. Articles include topics such as systems analysis, programming, employee relations, applications of computers, and product/equipment announcements.

Office Guide
Bureau of Business Practices
24 Rope Ferry Road
Waterford, CT 06385-9985
Issued twice each month, the six-page publication offers office hints and shortcuts that can be used as a training tool to upgrade office personnel.

Office Guide for Working Women
Bureau of Business Practice
24 Rope Ferry Road
Waterford, CT 06385
The magazine offers general articles and regular features on typing, vocabulary, and grammar applicable to office workers and/or secretarial science students.

Office Talks
Bureau of Business Practice
24 Rope Ferry Road
Waterford, CT 06385
Office techniques, personal appearance, office etiquette, cosmetics, hygiene for secretaries.

P.S. for Professional Secretaries
Bureau of Business Practices
24 Rope Ferry Road
Waterford, CT 06385
Helps office personnel to perform their tasks more quickly, easily, and efficiently.

The Secretary
Professional Secretaries Int.
301 East Armour Blvd.
Kansas City, MO 64111-1299
A publication for professional secretaries featuring articles by management, business educators, and secretaries that stress improving knowledge and ability in secretarial expertise.

Today's Office
Hearst Business Communications/UTP Division
645 Stewart Avenue
Garden City, NY 11530
A professional business magazine covering the office.

APPENDIX C

ESSENTIAL ELEMENT OUTLINE FOR OFFICE EDUCATION
CORRELATED TO OCL PUBLICATIONS

75.81(a) LEADERSHIP

(1)(A), (1)(B), (1)(C), (1)(D), and (1)(E) - Leadership characteristics, activities and responsibilities, committees, parliamentary procedure, and citizenship.
1. Personal Development for Cooperative Training, Unit 1, (OCL)
2. OEA Handbook
3. FFA Parliamentary Procedures Manual
4. Introduction to ODP, Unit VII (OCL)
5. General Clerical, Unit I, (OCL)

(2)(A), (2)(B) - EMPLOYMENT OPPORTUNITIES (Job application and interviewing)
1. Office Careers - Unit 2 (OCL)
2. General Clerical - Units I and IV (OCL)
3. Introduction to Word Processing - Unit I (OCL)
4. Slide Tape presentation - Seeking Employment (OCL)
5. Introduction to ODP - Unit V (OCL)

(2)(C), (2)(D) and (2)(E) - SUCCESSFUL EMPLOYMENT (Following directions, punctuality and dependability, and rules and standards of the work place
1. General Clerical - Units III and VII (OCL)
2. Introduction to ODP, Unit VI

(2)(F), (2)(G) and (2)(H) - PERSONAL DEVELOPMENT (Human relations, responsibility, work habits and attitudes)
1. General Clerical - Units II, VI and VII (OCL)
2. Banking, Savings & Loan - Units I and II (OCL)
3. Personal Development for Cooperative Programs - Units IV and V (OCL)
4. Introduction to ODP - Unit VI

75.81(a) ENTREPRENEURSHIP

(3)(A), (3)(B) and (3)(C) Business ownership, Opening and Business and the Free Enterprise System.
1. Entrepreneurship (OCL)

75.89(a) SKILLS IN OFFICE OCCUPATIONS

ETHICAL BUSINESS PROCEDURES (1)(A)
1. Personal Development for Cooperative Training - Unit IV (OCL)
2. Office Careers (OCL)

CAREERS IN THE OFFICE (2)(A)
1. Office Careers (OCL)
2. Occupational Clusters Instructional Guide (OCL)

HUMAN RELATIONS IN INTRAPERSONAL RELATIONSHIPS (3)(A)
1. Banking, Savings & Loan - Section I, Units I and II (OCL)

COMPONENTS OF PERSONAL DEVELOPMENT IN CAREER PLANS (4)(A)
1. General Clerical - Unit III (OCL)

PRIORITIZE AND ORGANIZE WORK (5)(A)
1. General Clerical - Unit VI (OCL)
2. ODP Clerical - Unit IX (OCL)

RESOURCES AND REFERENCES (6)(A)
1. General Clerical - Unit X (OCL)
2. ODP Clerical (OCL)
3. Introduction to Word Processing - Unit IX (OCL)

BUSINESS FORMS AND REPORTS (7)(A)
1. Typing - Units IV and V (OCL)
2. Clerk Typist - Units VII and VIII (OCL)

BUSINESS MACHINES (8)(A)
1. Clerk Typist - Units II and III (OCL)
2. Introduction to Word Processing Units VI and VII (OCL)
3. Office Machines (OCL)
4. Financial Responsibilities - Unit I (OCL)

75.89(a) FINANCIAL RESPONSIBILITIES

BUSINESS MATH (2)(A)
1. Clerk Typist - Units I and II (OCL)
2. Introduction to Word Processing - Unit VII (OCL)
3. Financial Responsibilities - Unit I (OCL)

BANKING ACTIVITIES (2)(B)
1. Banking, Savings & Loan - Section B, Units I, II, and III (OCL)
2. Financial Responsibilities - Unit III (OCL)

PRINCIPLES OF RECORD KEEPING (2)(C)
1. Clerk Typist - Section C, Units I and II (OCL)
2. Financial Responsibilities - Units II and IV (OCL)

75.89(a) COMMUNICATIONS

TELEPHONE TECHNIQUES (3)(A)
1. Communications - Unit I (OCL)
2. ODP Clerical - Unit VII (OCL)
3. Clerk Typist - Section E (OCL)

EFFECTIVE WRITTEN COMMUNICATION (3)(B)
1. Communications - Unit IV (OCL)
2. ODP Clerical - Unit II
3. Typing - Unit V

LANGUAGE USAGE SKILLS (3)(C)
1. Introduction to Word Processing - Unit V (OCL)
2. ODP Clerical - Unit V (OCL)
3. Communications - Unit V (OCL)

WORD PROCESSING AND COMPUTER TERMINOLOGY (4)(C)
1. Introduction to Word Processing - Units II, III, and IV (OCL)
2. Introduction to Microcomputer Application - Unit I (OCL)

75.89(a)(4) SAFETY

SAFE WORKING PRACTICES AND PROCEDURES
1. Office Careers (OCL)
2. Introduction to ODP - Unit II (OCL)

75.89(b)(1) KEYBOARDING

PROOFREADER'S MARKS (1)(A)
1. Introduction to Word Processing - Unit VIII (OCL)
2. ODP Clerical - Unit III (OCL)
3. Clerk Typist - Section A, Units I - IX (OCL)
4. Typing - Unit I (OCL)

CORRECTING ERRORS (1)(B)
1. Clerk Typist - Section A, Unit IV (OCL)
2. Typing - Unit II (OCL)

MAILABLE LETTERS (1)(C)
1. Typing - Units III and IV (OCL)
2. ODP Clerical - Unit II (OCL)
3. Introduction to Word Processing - Unit VI (OCL)

TRANSMITTING INFORMATION ELECTRONICALLY (1)(D)
1. Introduction to Word Processing, (OCL)

75.89(b)(2) RECORDS CONTROL AND MANAGEMENT II(8)

INDEXING, CODING & FILING--ALPHABETIC, NUMERIC, SUBJECT, AND GEOGRAPHIC (2)(A)
1. Filing (OCL)
2. ODP Clerical - Unit VIII (OCL)
3. Clerk Typist - Section B (OCL)

MANUAL & AUTOMATED RECORDS CONTROL (2)(B)
1. Filing (OCL)
2. Clerk Typist - Section B & C (OCL)

INCOMING AND OUTGOING MAIL (2)(C)
1. Clerk Typist - Section D (OCL)
2. Communications - Unit II (OCL)

APPENDIX D

SAMPLE

SCOPE AND SEQUENCE

(OFFICE EDUCATION)

UNIT	ESSENTIAL ELEMENT	TIME FRAME 1 HOUR LAB (# of hours)	TIME FRAME 2 HOUR LAB (# of hours)
ORIENTATION TO OE, OEA	75.81 (a)(1)(A,D)	3	3
SAFETY	75.89 (a)(4)	2	3
PARLIAMENTARY PROCEDURE	75.81 (a)(1)(B,C)	3	5
LEADERSHIP	75.81 (a)(1)(A,D)	2	3
CITIZENSHIP	75.81 (a)(1)(E)	2	3
OFFICE CAREERS	75.89 (a)(1,5)	3	5
TYPING REVIEW	75.89 (a)(1)(E,G,H) 75.89 (a)(3)(B) 75.89 (b)(1)(A,C)	5	20
RESOURCES & REFERENCES	75.89 (a)(1)(F)	3	5
RECEPTIONIST DUTIES	75.89 (a)(1)(A) 75.89 (a)(3)(A) 75.89 (b)(1)(C)	3	5
MAIL SERVICES	75.89 (b)(1)(C) 75.89 (b)(2)(C)	2	3
TELEPHONE TECHNIQUES	75.89 (a)(1) 75.89 (a)(3)(A)	4	5
BUSINESS ENGLISH	75.89 (a)(3)(C)	5	10
PROOFREADING/MAILABLE CORRESPONDENCE	75.89 (b)(1)(A,B,C)	5	10
BUSINESS MATH	75.89 (a)(2)(A)	5	10
CALCULATOR	75.89 (a)(1)(H) 75.89 (a)(2)(A) 75.89 (b)(3)(A)	10	20
TYPEWRITING (PRACTICE SET)	75.89 (a)(1)(E,H) 75.81 (a)(2)(C,G,H) 75.89 (a)(3)(B) 75.89 (b)(1)(A-C)	15	20
WORD & DATA PROCESSING	75.89 (a)(3)(D) 75.89 (b)(1)(D) 75.89 (b)(3)(C)	5	15
OFFICE MACHINES (Computer, Word Processor, Electronic & Memory Typewriters, Electronic Calculator, Copy Machine, Dictaphone, Etc.	75.89 (a)(1)(H) 75.89 (b)(3)(A,C) 75.89 (b)(1)(D)	50	80
PAYROLL/RECORDKEEPING/BANKING	75.89 (a)(2)(A-C) 75.89 (b)(4)(A-B)	10	20
ENTREPRENEURSHIP	75.81 (a)(3)(A-C)	5	5
HUMAN RELATIONS	75.81 (a)(1)(C) 75.81 (a)(1)(C,E) 75.81 (a)(2)(F)	5	10
JOB APPLICATION/EMPLOYMENT	75.81 (a)(1)(B,D) 75.81 (a)(2)(A-B) 75.89 (a)(5)	10	20
REPROGRAPHY/DUPLICATION	75.89 (a)(1)(H) 75.89 (b)(3)(B)	3	5
OFFICE SIMULATION	75.81 (a)(1)(E) 75.81 (a)(2)(A-H) 75.89 (a)(1)(A-H)	20	60
OTHER UNITS (EXAMPLES: Study Skills, Career Inventories & Surveys, Guest Speakers, Etc.)		As Time Permits	15
	TOTAL HOURS:	180	360

SAMPLE

LIST OF SUBJECT CONTENT AREAS AND TIME ALLOCATIONS

UNIT	ESSENTIAL ELEMENTS	TIME FRAME
Orientation and Safety	75.81(a)(1)(A,E) 75.81(a)(2)(D-F)	5 hours
Leadership	75.81(a)(1)(A-E)	5 hours
Typing Review Unit & Proofreading	75.89(a)(1)(E-G) 75.89(b)(1)(A-D)	10 hours
Resources and References	75.89(a)(1)(F)	2 hours
Human Relations	75.81(a)(2)(F)	5 hours
Business English	75.89(a)(3)(C)	3 hours
Business Mathematics	75.89(a)(2)(A)	2 hours
Telephone/Receptionist Duties	75.89(a)(3)(A,C) 75.81(a)(2)(A)	5 hours
Filing (Records Management)	75.89(b)(2)(A-B)	10 hours
Calculator	75.89(a)(2)(A) 75.89(b)(3)(A,C)	10 hours
Office Machines (Computer, Word Processor, Stenotype, Dictaphone, Memory Typewriter)	75.89(a)(1)(H) 75.89(b)(3)(A,C) 75.89(b)(1)(D)	50 hours
Duplication	75.89(b)(3)(B)	3 hours
Typewriting (Practice Set)	75.89(a)(1)(G) 75.89(b)(1)(A-D)	15 hours
Mail	75.89(b)(1)(C) 75.89(b)(2)(C)	2 hours
Bookkeeping & Recordkeeping (Payroll, Financial Management, Banking)	75.89(a)(2)(A-C) 75.89(b)(4)(A-B)	10 hours
Word & Data Processing	75.89(a)(3)(D) 75.89(b)(1)(D)	10 hours
Job Application & Employment	75.81(a)(2)(A-H)	10 hours
Entrepreneurship	75.81(a)(3)(A-C)	5 hours
Office Simulation	75.81(a)(1)(E) 75.81(a)(2)(A-H) 75.89(a)(1)(A-H)	20 hours

SAMPLE

OFFICE EDUCATION LAB (2 Hours)

UNITS OF INSTRUCTION

Units	Essential Elements	Time Frame
Banking	75.89-a2B 75.89-b4A	12 hours
Business English	75.89-a3C	20 hours
Business Math	75.89-a2A	20 hours
Composing Business Correspondence	75.89-a3B	14 hours
Data Processing - Data Entry	75.89-b3C	20 hours
Entrepreneurship	75.81-a3C,3B,3C	8 hours
Filing	75.89-b2A,2B	24 hours
Human Relations	75.81-a2C,2D,2E,2F,2G,2H 75.89-a1A,1B,1C,1E	10 hours
Job Application	75.81-a2A,2B	30 hours
Mailing and Shipping	75.89-b1C,2C	12 hours
Office Machines	75.89-a1H 75.89-b3A,3B	32 hours
Orientation	75.81-a2A,2C,2D,2E,2F,2G,2H	10 hours
Leadership and Parliamentary procedure	75.81-a1A,1B,1C,1D,1E	8 hours
Payroll	enrichment	20 hours
Personal Development	75.89-a1D	6 hours
Proofreading	75.89-b1A	8 hours
Recordkeeping	75.89-a2C 75.89-b4B	10 hours
Resources and References	75.89-a1F	4 hours
Safety	75.89-a4	2 hours
Spelling	enrichment	6 hours
Telephone	73.89-a3A	16 hours
Typing Correspondence	75.89-a1E 75.89-b1C	14 hours
Typing Forms	75.89-a1E,1G	10 hours
Typing Review	75.89-b1B	4 hours
Word Processing	75.89-a3D 75.89-b1A,1D,3C	20 hours
	TOTAL	340 hours

APPENDIX E

A large number of resource materials may be easily acquired for use in the Office Education classroom. However, materials lose their value unless they are readily accessible. In organizing the OE classroom, the teacher should select systems that arrange resources in efficient, attractive ways. The organization and decoration of the classroom should express the message: "OE is important and exciting." The following sections provide hints and suggestions for organizing the classroom and developing a filing system.

Physical Arrangement

The classroom should be arranged as similarly to an office atmosphere as feasible. To achieve this look, cluster students' secretarial desks to provide for a receptionist and office manager area. In addition, a teacher's desk, filing cabinets, bulletin board, chalkboard, and storage for instructional materials, supplies, and teaching aids should be provided.

Equipment, supplies, and instructional resource materials should be arranged and stored so that they are easily accessible to the teacher and students. The equipment and work areas may vary according to the size of the classroom and the individual needs of each teacher.

Filing System

An efficient filing system can be the "backbone" of any teacher. Materials should be filed so that they can be easily located by the teacher or students. A filing system can reduce classroom clutter, promote efficient use of time, and promote safe storage habits.

Use sturdy file cabinets and store the following materials in labeled folders:

. . . Instructional Materials

- Transparency masters
- Duplicated activity sheets
- Answer sheets

. . . Individual Student Folders

- Personal information
- Permission slips
- Progress charts

. . . General Records

- Inventory lists

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. Requisitions

. Follow-up records

. Grade sheets

. Travel forms

. Correspondence

. Resource and reference materials lists

. Miscellaneous

Student Records

To assist the teacher in completing forms and keeping up with past and present students, files should be maintained on each student. The student competency profile is a quick and easy reference.

These profiles are printed on file-type folders designed for individual student use. The front of the profile should be completed by the student at the beginning of the year. Inside the profile, specific job competencies for particular office education areas are listed.

Classroom Policies and Procedures

In establishing classroom policies and procedures, establish only rules you intend to enforce. Make these rules positive instead of negative. For example:

. . . Negative: Do not sit on desks or tables at any time.

. . . Positive: You may sit only on the chairs provided for you.

Be sure that school policies are included. Keep policies and procedures to a minimum. Below is a sample of policies and procedures for classroom management:

1. Attendance--Attendance is a must for all OE students. Frequent absenteeism is regarded by employers as a reason for dismissal. Should you be sick, you must call in sick.

2. Tardiness--Promptness to OE class is expected as it establishes good work habits for the office worker.

3. Attitudes and Work Habits--Your attitude toward work assignments, suggestions from the instructor and relations with other students in the classroom are indications of your ability to succeed on the job or adapt to the world of business. It is necessary to exhibit healthy, cheerful attitudes and responsible work habits during all class sessions. Each six-week period will include a grade for attitude and work habits, as they are so vitally important to your training in OE.

4. Equipment and Supplies--The equipment and furnishings of your classroom are expensive and must be properly maintained in order for the program to continue to exist. You are responsible for the work area and the machines at your desk. Leave your work area clean each day--put all trash in the containers provided, replace any reference books you have used, and put your chair under your desk when you leave. A part of your attitude and work habits grade will be based on how well you care for equipment and supplies.

5. Student Supplies--You will need to furnish your own typing erasers, typing paper, notebook binders (the official OEA notebook), and any other incidental items deemed necessary by your instructor.

6. Office Manager--Every three weeks, a student will be assigned the job of office manager as a part of his/her training. The office manager's responsibilities are checking attendance, keeping account of supplies and reordering when shortages occur, checking work areas of all students at the end of each class period, and assisting the instructor with paper work. The office manager will assign to students work requested by other persons. Students in general will be evaluated on their ability to cooperate with the office manager and comply with his/her requests. The office manager will receive credit for carrying out this responsibility. An assistant or alternate will be assigned to perform these duties in the absense of the office manager. Any malfunction of a machine or any supply request should be reported to the office manager.

7. Receptionist--A receptionist will be appointed from each class to serve for three weeks. Duties include answering the telephone, handling office callers, referring outside work to the office manager, and doing specific jobs in indexing, filing, and typing for the OE instructor. The receptionist may also be responsible for the bulletin board. When not involved in receptionist duties listed above, the receptionist is expected to work on an assignment.

APPENDIX F

Sample

Rotation Plan

Student's Name	WEEKS 1	2	3	4	5	6
1. _____	TT	TM	MI	WP	TM	DC
2. _____	PC	TT	TM	MI	WP	TM
3. _____	DP	PC	TT	TM	MI	WP
4. _____	TM	DC	PC	TT	TM	MI
5. _____	WP	TM	DC	PC	TT	TM
6. _____	MI	WP	TM	DC	PC	TT
7. _____	OF	MI	WP	TM	DC	PC
8. _____	REC	OF	MI	WP	TM	DC
9. _____	TT	REC	OF	MI	WP	TM
10. _____	PC	TT	REC	OF	MI	WP
11. _____	DC	PC	TT	REC	OF	MI
12. _____	TM	DC	PC	TT	REC	OF
13. _____	WP	TM	DC	PC	TT	REC
14. _____	MI	WP	TM	DC	PC	TT
15. _____	TM	MI	WP	TM	DC	PC

TT Typing
PC Printing Calculator
DC Display Calculator
TM Transcribing Machine
WP Word Processing
MI Microcomputer
OF Office Manager
REC Receptionist

Sample

Student's Grade Sheet

NAME:_____ CLASS PERIOD: _____

BEGINNING DATE:_____ ENDING DATE:_____ SIX WEEKS: 1 2 3 4 5 6

PROJECT	STARTED	GRADES	FINISHED

ATTENDANCE (1/5) _____
ATTITUDE GRADE (1/5) _____
CLASSWORK (2/5) _____
TESTS (1/5) _____
SIX WEEKS AVERAGE * _____

SIX WEEKS GRADE:
SIX WEEKS AVERAGE (3/4) _____
SIX WEEKS TEST _____
FINAL AVERAGE = _____

APPENDIX G

PRE-EMPLOYMENT LABORATORY PROGRAM

The pre-employment laboratory program offers young men and women the opportunity to learn office procedures, data processing, or data entry through a simulated office classroom. The primary purpose of the lab is to train students for entry-level positions in office occupations. The lab may be one or two hours a day.

Responsibilities of a Pre-employment Lab Teacher

A pre-employment lab teacher needs to have administrative, teaching, and public relations skills. Below is a chart which indicates the instructor's responsibilities in each area:

Teaching

Informs students of classroom policy and procedures

Provides battery instruction
- Basic instruction
- Areas of instruction
- Essential elements

Provides individualized instruction
- Essential Elements
- Areas of student's career objectives

Oversees youth organization work
- Organization activities
- Purposes and values
- Membership
- Correspondence
- Projects
- Minutes
- Conferences
- Leadership development
- Competitive events

Establishes testing and grading procedures

Public Relations

Exemplifies values of Office Education

Promotes out-of-school relationships
- Parents
- News media
- Civic organizations
- General public
- Advisory committees

Promotes in-school relationships
- Students
- Faculty
- Administration
- Supporting Personnel

Administration

Handles administrative responsibilities
- Community occupational study
- Student follow-up
- Legal responsibility
- Records and reports

Utilizing a two-hour Period

Many pre-employment labs are two hours, so in order to keep the students interested, the teacher may consider the following suggestions:

. . . Lecture only one hour and individualize one hour.

. . . Use a variety of teaching strategies to keep the students motivated.

. . . Use hands-on methods often.

. . . Plan in advance. It takes much planning for two hours of instruction.

. . . Provide supplies that are easily accessible to students.

. . . Provide written assignment sheets for students because it is impossible for the teacher-supervisor to give instructions to each student.

. . . Provide an office environment and serve as an office supervisor instead of as a teacher.

. . . Have students act as receptionist and office managers.

For the new teacher, below is a sample of what could be done during the first two weeks with a two-hour laboratory.

Sample

First Week

Day 1-First Hour	Second Hour
Fill out school forms. Introduce OE and OEA. Get acquainted.	Show students around classroom. Introduce machines.
Day 2-First Hour	**Second Hour**
Pre-test on skills	Short assignment on all machines. Rotate all students.
Day 3-First Hour	**Second Hour**
Overview of OEA Discuss classroom policies.	Review of typing
Day 4-First Hour	**Second Hour**
Orientation to world of work	Review of typing
Day 5-First Hour	**Second Hour**
Introduce students to reference materials, supply cabinets, use of supplies and care of equipment.	Open discussion

Second Week

Day 1-First Hour	Second Hour
Introduce rotation plan and explain assignment sheet.	Start rotation plan.
Day 2-First Hour	**Second Hour**
Orientation to office careers	Rotation plan
Day 3-First Hour	**Second Hour**
Careers	Rotation plan
Day 4-First Hour	**Second Hour**
Rotation plan	Careers
Day 5-First Hour	**Second Hour**
Rotation plan	Review of office manager and receptionist

Group Instruction

Several units of Office Education may be taught by group instruction. These units are called battery units. Battery units are units, taught through group instruction, that all students will need regardless of their career objectives. Some of the battery units taught by conventional methods are:

. . . Leadership

. . . Job Application Process

. . . Entrepreneurship

. . . Business Ethics

. . . Office Careers

. . . Human Relations

. . . Personal Development

. . . Planning and Organizing Work Activities

. . . Using Resources and References

. . . Safety

. . . Telephone Techniques

. . . Handling the Mail

Individualized Instruction

In individualized instruction, the teacher-supervisor should make sure students are rotated to all equipment or work stations related to the student's interest or career objective at least once during the year. Students' work should be individualized at these stations. Some students will be able to complete the project within two or three days, while others may not complete the work within a week. Avoid giving the faster student busy work. Try to provide training that is more technical and at a higher decision-making level. This additional training will aid in successful implementation of a rotation plan. On the following page is a sample rotation plan.

Evaluation

The students' primary interest in every class is how they are going to be evaluated. The State Board of Education Rules for Curriculum states students should be evaluated on a 0-100 scale with 70 and above receiving course credit. At the beginning of the year, you should establish the grading system for your class. Consideration should be given to how individualized instruction, battery instruction, attendance, attitude, etc., will affect the students' grades for the grading period.

In evaluating students on their individualized instruction, it is impossible to evaluate each job assigned. Therefore, on some assignments, answer sheets should be given to the students so they may check their answers with the teacher's key. On some assignments, the teacher should grade for specifics. For instance, grade one paper for proofreading, one for typographical errors, one for format, etc. Since students will not be completing the same assignments, students should be given a grade sheet. On the following page is a sample of a grading sheet. Remember to grade a student on an individualized basis, not against what other students have accomplished.

Instructional Materials

There are two types of instructional materials: commercial and teacher-prepared materials. Some sources of commercial materials are: handouts, information sheets, transparencies, etc. The Occupational Curriculum Laboratory provides office education curriculum guides to assist the teacher with instructional units which could be taught.

In selecting instructional materials, the teacher-supervisor should consider:

. . . the subject matter

. . . the students' abilities

. . . the time available

. . . the goals and objectives

. . . the tools necessary

. . . the funds available

In previewing material, the following questions should be asked concerning the material:

. . . Will it meet the lesson's objectives?

. . . Will it motivate the students?

. . . Is the vocabulary understandable for the students?

. . . Are the materials being used similar to those used on the job?

. . . Is the equipment to be used in good operating condition?

APPENDIX H

COOPERATIVE PROGRAM

The Office Education cooperative program offers young men and women the opportunity to receive on-the-job training in an office-related occupation in addition to classroom instruction related to the office training. Students who are employed 15 hours per school week receive three credit hours, while students employed 10 hours per school week receive two credit hours.

Student Eligibility

To be eligible for cooperative education, a student must be:

. . . a junior or senior

. . . at least 16 years of age

. . . interested in a business or office career

. . . able to furnish transportation to and from work

Responsibilities of a Cooperative Teacher

Cooperative office education units may be allocated on a 10- or 11-month basis. The additional month the cooperative teacher may work shall be utilized to solicit training stations, place students in employment, develop training plans, develop instructional materials, and other activities directly related to and for the purpose of improving the program. The cooperative teacher must:

. . . file weekly itineraries with the appropriate local school administrator covering the period of time when official activities are conducted away from the school campus

. . . visit each student training station at least eight times each school year, including at least one visit during each student grading period

A cooperative teacher needs administration, coordination, teaching, and public relations skills as well as the ability to maintain effective relationships with employers in various fields. The coordinator must select, counsel, and supervise students in school and at work. Above all, a coordinator needs to be a versatile and talented teacher, with the ability to adapt to a variety of changing roles and situations. On the following page is a table which lists the responsibilities of a cooperative teacher.

RESPONSIBILITIES OF A COOPERATIVE TEACHER

Teaching

Provides individualized instruction
- Essential elements
- Skills needed for their job

Provides battery instruction
- Basic characteristics
- Areas of instruction

Oversees youth organization work
- Leadership development
- Purposes and values
- Characteristics
- Organizational activities
- Competitive events

Evaluates

Public Relations

Promotes out-of-school relationships
- Employers
- Parents
- Employee organizations
- News media
- Civic organizations
- General public
- Advisory committee

Promotes in-school relationships
- Administration
- Faculty
- Students
- Supporting personnel

Exemplifies values of Cooperative Office Education

Coordination

Selects training stations

Selects students

Places students

Visits work stations

Consults employers as to progress of students

Organizes an effective advisory committee

Administration

Handles administrative responsibilities
- Community occupational study
- Student follow-up
- Legal responsibilities
- Records and reports

Evaluates program
- Instruction
- Coordination
- Relationships
- Administration

Training Stations

In selecting training stations, the teacher-coordinator should use the following criteria:

. . . reputable business and employer

. . . competent present employees

. . . progressive business with high standards of workmanship

. . . suitable working conditions pertaining to health, safety, and moral environment

. . . understanding and interested employer regarding the purposes of the cooperative program

. . . capable, interested supervisor who is willing to provide the student with the necessary constructive help on the job

. . . need for a part-time employee for at least fifteen hours a week during the school year

. . . comparable wage scale with similar occupations in the community

Training Plans

The original and one copy of the training plan should be sent to the educational specialist three weeks after a student is employed. The educational specialist will return one copy. The teacher should make three copies: one to give to the student, one for the employer, and one to keep in the student's folder. The front side of the training plan consists of:

. . . name of student-learner, employer, business establishment, school, training sponsor or supervisor, coordinator, and parents

. . . dates of beginning and ending of training period

. . . beginning rate of pay, proposed scale of increases during the school year, and working hours

. . . statement of student's career objective, including a brief description of the skills, aptitudes, and information necessary for a worker in the occupation

. . . responsibilities of the student-learner, the employer, and the school to the program of training

The back side of the training plan consists of:

. . . list of required essential elements for each occupational training area having essential elements described, as per the State Board Rules for Curriculum

. . . brief outline of the related study assignments that will be provided at school

In the appendix to this handbook, are six pre-printed forms which are recommended for use in completing the back side of the training plan. Simply complete the plan corresponding to the student's job title and attach the form to the training plan.

Teaching

Students should receive both individual and group instruction. The major portion of the classroom time should be devoted to individualized instruction related to the occupational intent of the student. On the recommended standardized training plans is a list of essential elements which should be completed by the coordinator in cooperation with the employer. Also on the training plan is a suggested course outline which coordinates with the training that students will receive on the job. The teacher will need to modify each training plan to meet the specific needs of each student. Some units should be taught by group instruction. These units are called battery units. Some battery units could be:

. . . Leadership

. . . Job Application Process

. . . Business Ethics

. . . Office Careers

. . . Human Relations

. . . Personal Development

. . . Planning and Organizing Work Activities

. . . Using Resources and References

. . . Safety

. . . Telephone Techniques

. . . Handling the mail

. . . Financial Responsibilities

. . . Language Usage

Employer Evaluation

During each reporting period, the employer should evaluate the student's work, attitudes, ability to perform, and ability to get along with others. The teacher-coordinator shall visit the training station at least eight times each school year, including at least one visit during each grading period.

APPENDIX I

The essential elements common to all vocational programs and Office Education as described in the State Board of Education Rules for Curriculum shall be a part of the cooperative student's curriculum.

The specific occupational essential elements listed below are provided as a convenience to assure the required minimum training is made available. Additional space is available to add specific individual training opportunities not identified as an essential element. NOTE: Occupational training objectives having no identified essential elements will require the training plans to be totally individually developed.

Required Essential Elements	To Be Done		Related Study Assignment
	On the job	Related Class	
Leadership concepts and skills			Job Related Activities
Identify characteristics and responsibilities of leaders and effective group members			____Leadership
Participate in orderly meetings conducted according to parliamentary procedure			____Job Application Process
Function effectively on committees			____Entrepreneurship
Plan and conduct leadership activities			
Prepare for effective citizenship and participation in our democratic society			Clerical Activities
Concepts and skills related to successful employment			____Business Ethics
Develop an awareness of employment opportunities in chosen field			____Office Careers
Practice correct procedures for job application and interview			____Human Relations
Develop the ability to take and follow both oral and written directions			____Personal Development
Practice punctuality and dependability			____Planning and Organizing Work Activities
Observe rules and standards of the work place			____Using Resources and References
Demonstrate an ability to work with others harmoniously			____Safety
Develop responsibility and the ability to follow through on assigned tasks			____Telephone Techniques
Exhibit productive work habits and attitudes			____Handling the Mail
Concepts and skills associated with entrepreneurship			Typing
Recognize opportunities and options for business ownership			____Proofreading
Identify entry-level procedures, planning processes, and terms needed to open a business			____Correcting Errors
Develop an understanding of the role of small business in the free enterprise system			____Typing Letters and Envelopes
Concepts and skills related to all office occupations			____Typing Business Forms
Identify and practice ethical business procedures			____Typing Business Reports
Develop an understanding concerning careers in office occupations and levels of competency			____Typing Legal Papers
Apply the basic concepts of human relations in all types of interpersonal relationships			____Typing Medical Forms and Reports
Identify components of personal development as they relate to career plans			Office Equipment
Prioritize and organize work efficiently			____Ten-Key Adding Machine
Identify and use resources and references available			____Electronic Calculator
Identify the different types of business forms and reports and procedures for processing them			____Fluid Duplicator
Demonstrate basic knowledge and usage of business machines			____Stencil Duplicator
Concepts and skills involved in financial responsibilities			____Offset Duplicator
Demonstrate the ability to add, subtract, multiply, and divide whole numbers, fractions, and numbers containing decimals			____Transcriber
Maintain a checking account, including making deposits, writing checks, reconciling bank statements, and filing cancelled checks			____Microcomputers
Apply the principles of record keeping			Filing Duties
Concepts and skills necessary for effective communication			____Filing Personal Names
Identify and use correct techniques when using the telephone for business purposes			____Filing Business Forms
Prepare effective written communication			____Filing Organization Names
Identify and apply correct language usage skills in business			____Correspondence Filing
Become familiar with word processing and computer terminology			____Subject Filing
Concepts and skills related to safety and safe working conditions			____Numeric Filing
Identify, understand, and apply safe working practices and procedures to all office training			____Geographic Filing
			Office Bookkeeping Functions
			____Maintaining the Petty Cash Fund
			____Maintaining a Checking Account
			____Handling Payroll

Required Essential Elements	To Be Done		Related Study Assignment
	On the job	Related Class	
Concepts and skills involved in keyboarding in secretarial and general office			
Recognize proofreader's marks and use them in editing			
Select appropriate tools for correcting errors and use them correctly			
Demonstrate procedures necessary in preparing mailable letters, envelopes, and packages			
Understand methods of transmitting information electronically			
Concepts and skills necessary for records control and management			
Identify correct usage in applying terminology and procedures for indexing, coding, and filing using the alphabetic, numeric, subject, and geographic systems			
Understand procedures for controlling manual and automated records			
Understand and demonstrate the procedures of handling incoming and outgoing mail			
Concepts and skills necessary for the operation of office machines			
Employ the touch system for computation of simple and complex mathematical problems using the electronic calculator			
Understand and demonstrate skills needed in operating copy machines			
Demonstrate the process required in operating data/word processing equipment			
Concepts and skills involved in financial responsibilities			
Maintain a checking account, including making deposits, writing checks, reconciling bank statements, and filing cancelled checks			
Apply the principles of record keeping			
Additional Occupational Experiences			

APPENDIX J

Essential Elements

To aid in identifying the areas of instruction for office education the State Board of Education has adopted the following essential elements for office education:

. . . essential elements for all vocational programs

. leadership concepts and skills

identify characteristics and responsibilities of leaders and effective group members

participate in orderly meetings conducted according to parliamentary procedure (optional in occupational orientation)

function effectively on committees (optional in occupational orientation)

plan and conduct leadership activities; and

prepare for effective citizenship and participation in our democratic society

. concepts and skills related to successful employment

develop an awareness of employment opportunities in chosen field

practice correct procedures for job application and interview

develop the ability to take and follow both oral and written directions

practice punctuality and dependability

observe rules and standards of the work place

demonstrate an ability to work with others harmoniously

develop responsibility and the ability to follow through on assigned tasks; and

exhibit productive work habits and attitudes

. concepts and skills associated with entrepreneurship

recognize opportunities and options for business ownership

identify entry-level procedures, planning processes, and terms needed to open a business; and

develop an understanding of the role of small business in the free enterprise system

. . . Objectives for these elements must be modified to suit the needs and abilities of individual handicapped students, disadvantaged students, and those with limited English proficiency.

. . . Office education (1, 2, or 3 units) shall include the following essential elements:

. Concepts and skills related to all office occupations. The student shall be provided opportunities to:

identify and practice ethical business procedures

develop an understanding concerning careers in office occupations and levels of competency

apply the basic concepts of human relations in all types of interpersonal relationships

identify components of personal development as they relate to career plans

prioritize and organize work efficiently

identify and use resources and references available

identify the different types of business forms and reports and procedures for processing them; and

demonstrate basic knowledge and usage of business machines

. Concepts and skills involved in financial responsibilities. The students shall be provided opportunities to:

demonstrate the ability to add, subtract, multiply, and divide whole numbers, fractions, and numbers containing decimals

maintain a checking account, including making deposits, writing checks, reconciling bank statements, and filing cancelled checks; and

apply the principles of record keeping

. Concepts and skills necessary for effective communication. The student shall be provided opportunities to:

identify and use correct techniques when using the telephone for business purposes

prepare effective written communication

identify and apply correct language usage skills in business; and

become familiar with word processing and computer terminology

. Concepts and skills related to safety and safe working conditions. The student shall be provided opportunities to identify, understand, and apply safe working practices and procedures to all office training situations.

. specific occupations being taught

. . . Secretarial and general office (1, 2, or 3 units) shall include office education core elements and the following essential elements:

. Concepts and skills involved in keyboarding in secretarial and general office. The student shall be provided opportunities to:

recognize proofreader's marks and use them in editing

select appropriate tools for correcting errors and use them correctly

demonstrate procedures necessary in preparing mailable letters, envelopes, and packages; and

understand methods of transmitting information electronically

. Concepts and skills necessary for records control and management in secretarial and general office. The student shall be provided opportunities to:

identify correct usage in applying terminology and procedures for indexing, coding, and filing using the alphabetic, numeric, subject, and geographic systems

understand procedures for controlling manual and automated records; and

understand and demonstrate the procedures of handling incoming and outgoing mail

. Concepts and skills necessary for the operation of office machines in secretarial and general office. The student shall be provided opportunities to:

employ the touch system for computation of simple and complex mathematical problems using the electronic calculator

understand and demonstrate skills needed in operating copy machines; and

demonstrate the process required in operating data/word processing equipment

. Concepts and skills involved in financial responsibilities. The student shall be provided opportunities to:

maintain a checking account, including making deposits, writing checks, reconciling bank statements, and filing cancelled checks; and

apply the principles of record keeping

. . . Word processing (1, 2, or 3 units) shall include office education core elements, secretarial and general office elements, and the following essential elements:

. Concepts and skills related to word processing. The student shall be provided opportunities to:

demonstrate proficiency in business English

identify and apply correct format for business correspondence and documents

demonstrate proficiency in spelling and proofreading

demonstrate proficiency in dictation and transcription

identify and understand terminology used in word processing

demonstrate proficiency in using word processing equipment

demonstrate, classify, and sequence procedures in word processing

understand computer terminology as it relates to word processing

update word processing and computer terminology; and

identify new and current developments in equipment

. . . Office duplicating practices (1, 2, or 3 units) shall include office education core elements and the following essential elements:

. Concepts and skills related to general safety needs and regulations. The student shall be provided opportunities to recognize and demonstrate general safety in the laboratory.

. Concepts and skills related to office duplication. The student shall be provided opportunities to:

understand and demonstrate image processing for duplicating

demonstrate the procedures and equipment used in completing layouts and masters for duplication; and

demonstrate the procedures used in operating duplicators

. Concepts and skills related to supplementary machines. The student shall be provided opportunities to understand and demonstrate the use of the machines used in bindery operations.

. Concepts and skills related to typewriting. The student shall be provided opportunities to demonstrate the ability to keyboard materials for duplication.

. Concepts and skills related for electronic calculator. The student shall be provided opportunities to demonstrate the ability to solve mathematical problems using the touch method.

. Concepts and skills related to filing. The student shall be provided opportunities to identify the correct procedures in alphabetic filing.

. . . Bookkeeper (2-3 units) shall include office education core elements and the concepts and skills in handling general bookkeeping duties. The student shall be provided opportunities to:

. enter and verify details of transactions in chronological order in journals

. summarize details on separate ledgers and transfer data to general ledger using manual or automated procedures

. balance books and compile statistics to prepare required financial reports

. identify terms, characteristics, and procedures in maintaining a petty cash fund

. maintain a checking account, including making deposits, writing checks, endorsing checks, reconciling bank statements, and filing cancelled checks

. prepare a payroll including computing gross and net pay, withholding social security, and other payroll forms

. prepare required tax reports; and

. maintain customer ledger cards and handle monthly billings

. . . Stock inventory clerk (2-3 units) shall include office education core elements and the concepts and skills related to stock inventory clerk. The student shall be provided opportunities to:

. identify stock inventories and records systems

. understand procedures in compiling, comparing, checking, and verifying orders

. understand procedures for stock ordering and reordering

. demonstrate procedures for completing purchase requisitions

. understand procedures for materials inspection and recording shortages, errors, or damages; and

. understand procedures in handling credits, returns, and back orders

. . . Office education. In addition to the courses described in the previous six subsections, schools may offer office education in any of the occupations listed in this section or in those justified by employment needs. The following may be offered:

. medical secretary

. legal secretary

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. insurance clerk

. banking and related financial employee; and

. business data entry

. . . Data processing (1, 2, or 3 units) shall include the following essential elements:

. Concepts and skills related to general data processing. The student shall be provided opportunities to:

demonstrate comprehension of data processing terms

understand aspects of input and output; and

understand the major components of data processing systems

. Concepts and skills related to data entry. The student shall be provided opportunities to understand and demonstrate the use of data entry equipment

. Concepts and skills related to programming and languages. The student shall be provided opportunities to:

apply the concepts of logic to programming problems

translate the applied solution into a common programming language; and

demonstrate the ability to debug and audit a solution

. Concepts and skills related to data representation and storage. The student shall be provided opportunities to:

demonstrate knowledge of computer numbering systems, data codes, and basic concepts of data storage; and

establish random and sequential file structures

. Concepts and skills related to computer operations. The student shall be provided opportunities to:

demonstrate the use of computer equipment

demonstrate the use of job control language; and

schedule and process requests to minimize the operational steps and run time

. Concepts and skills related to filing. The student shall be provided opportunities to identify the correct procedures in alphabetic filing.

. . . Bookkeeper (2-3 units) shall include office education core elements and the concepts and skills in handling general bookkeeping duties. The student shall be provided opportunities to:

. enter and verify details of transactions in chronological order in journals

. summarize details on separate ledgers and transfer data to general ledger using manual or automated procedures

. balance books and compile statistics to prepare required financial reports

. identify terms, characteristics, and procedures in maintaining a petty cash fund

. maintain a checking account, including making deposits, writing checks, endorsing checks, reconciling bank statements, and filing cancelled checks

. prepare a payroll including computing gross and net pay, withholding social security, and other payroll forms

. prepare required tax reports; and

. maintain customer ledger cards and handle monthly billings

. . . Stock inventory clerk (2-3 units) shall include office education core elements and the concepts and skills related to stock inventory clerk. The student shall be provided opportunities to:

. identify stock inventories and records systems

. understand procedures in compiling, comparing, checking, and verifying orders

. understand procedures for stock ordering and reordering

. demonstrate procedures for completing purchase requisitions

. understand procedures for materials inspection and recording shortages, errors, or damages; and

. understand procedures in handling credits, returns, and back orders

. . . Office education. In addition to the courses described in the previous six subsections, schools may offer office education in any of the occupations listed in this section or in those justified by employment needs. The following may be offered:

. medical secretary

. legal secretary